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# STUDIE ONTVANGENDE GROEVE EN GRAVERIJ – METHODOLOGIE ATTENUATIEFACTOREN

**STANDAARDPROCEDURE**
**REGELING VOOR GEBRUIK VAN BODEMMATERIALEN**

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5 *Samenvatting:*
De standaardprocedure voor het uitvoeren van een studie voor de vergunning van de opvulling van groeven en graverijen met bodemmaterialen. De standaardprocedure geeft richtlijnen voor de karakterisatie, modellering en risico-analyse van de opvulling door middel van de methodologie met attenuatiefactoren. De impact op (grond)waterkwaliteit is hierbij het uitgangspunt.

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# 1 LIJST VAN SYMBOLEN EN AFKORTINGEN

**Afkortingen**

| | |
|---|---|
| AF | attenuatiefactor |
| ALBON | Afdeling Land en Bodembescherming, Ondergrond, Natuurlijke Rijkdommen |
| BBO | beschrijvend bodemonderzoek |
| BETXS | kleine groep aromatische koolwaterstoffen |
| BPA | bijzonder plan van aanleg |
| BSN | bodemsaneringsnorm |
| CDE | Convectie-dispersie vergelijking |
| CEC | cation exchange capacity |
| HCM | hydrogeologisch conceptueel model |
| MER | milieu effect rapport |
| MO | minerale olie |
| MTBE | methyl-tert-butylether |
| OHH | enkele alkanen |
| PAK | polyaromatische koolwaterstoffen |
| PCB | polychloorbiphenyl |
| RUP | ruimtelijk uitvoeringsplan |
| TW | toetsingswaarde |
| VLAREBO | Vlaams reglement rond de Bodemsanering |
| VLAREM | Vlaams reglement betreffende de milieuvergunning |
| VOCl | vluchtige organochloor verbindingen |
| WVG | waarde vrij gebruik |

**Symbolen**

| | | |
|---|---|---|
| $c_0$,max | toetsingswaarde voor totaalconcentraite in de opvulling | (mg/kg DS) |
| $c_{gw,c}$ | kritische grondwaterconcentratie | (mg/l) |
| $c_{max,receptor}$ | maximale concentartie aan receptor | (mg/m³) |
| $c_o$ | concentratie in poriënwater opvulmateriaal | (mg/m³) |
| D | dispersiecoëfficiënt | (m²/j) |
| $D_a$ | diffusiecoëfficiënt in lucht | (m²/u) |
| DF | verdunningsfactor | (–) |
| Ec | elektrische geleidbaarheid | (µS/cm) |
| $f_{nd}$ | fractie niet-gedissocieerd | (–) |
| $f_{oc}$ | fractie organische koolstof | (–) |
| g | graviteitsconstante | (m/s²) |
| h | stijghoogte, grondwaterpotentiaal | (m) |

| | | |
|---|---|---|
| H' | dimensieloze Henry coëfficiënt | -- |
| i | hydraulische gradiënt | (m/m) |
| k | hydraulische geleidbaarheid | (m/d) |
| kD | doorlaatvermogen, transmissiviteit | ($m^2$/d) |
| $K_d$ | vast-vloeibaar verdelingscoëfficiënt | ($m^3$/kg) |
| $K_H$ | Henry coëfficiënt | (Pa.$m^3$/mol) |
| $K_{oc}$ | organische koolstof-water verdelingscoëfficiënt | ($m^3$/kg) |
| $K_{ow}$ | octanol-water verdelingscoëfficiënt | ($m^3$/kg) |
| $M_{pw}$ | concentratie in poriënwater | (mg/$m^3$) |
| $M_{tot}$ | totaalconcentratie | (mg/kg) |
| MW | moleculair gewicht | (g/mol) |
| n | porositeit als volumetrisch vochtgehalte bij verzadiging | (–) |
| $n_e$ | effectieve porositeit | (–) |
| p | vloeistofdruk | (N/$m^2$) |
| pH | zuurtegraad | (–) |
| q | eenheidsdebiet of filtersnelheid, Darcy flux | (m/d) |
| Q | (doorstroom)debiet | ($m^3$/d) |
| S | oplosbaarheid | (mol/$m^3$) of (µg/l) |
| V | volume materiaal | ($m^3$) |
| v | stromingssnelheid grondwater (aquifer) | (m/d) |
| v | poriënwatersnelheid (bodem) | (m/j) |
| $V_{por}$ | poriënvolume | ($m^3$) |
| z | plaatshoogte | (m) |
| | | |
| θ | volumetrisch vochtgehalte | ($m^3$/$m^3$) |
| $\theta_g$ | gravimetrisch vochtgehalte | (kg/kg) |
| λ | dispersiviteit | (–) |
| ρ | specifiek volumegewicht, droge stof dichtheid | (kg/$m^3$) |
| $\rho_w$ | dichtheid van water | (kg/$m^3$) |
| Φ | porositeit, benaderend via dichtheid kwarts | ($cm^3$/$cm^3$) |
| ω | hydrostatische druk | (m) |

# 2 INLEIDING

Conform de bepalingen van artikel 5.60.2 van het besluit van de Vlaamse Regering van 1 juni 1995 houdende algemene en sectorale bepalingen inzake milieuhygiëne, kunnen groeven, graverijen, uitgravingen of andere putten, die conform hun nabestemming ingedeeld worden ingedeeld in bestemmingstype I, II en III, opgevuld worden met bodemmaterialen die voldoen aan 80 % van de overeenstemmende bodemsaneringsnormen van

het overeenkomstige bestemmingstype, vermeld in bijlage IV van het VLAREBO. Voor groeven, graverijen, uitgravingen of andere putten, die conform hun nabestemming ingedeeld worden ingedeeld in bestemmingstype IV en V, moeten de bodemmaterialen voldoen aan de waarde van bijlage IV voor een bestemmingstype III.

De bouwheer moet door middel van een studie, uitgevoerd door een bodemsaneringsdeskundige volgens een standaardprocedure, het bewijs leveren dat het gebruik van bodemmaterialen als bodem geen verontreiniging van het grondwater kan veroorzaken en dat mogelijke blootstelling aan de verontreinigde stoffen geen extra risico oplevert. Richtlijnen voor de karakterisatie, modellering en risico-analyse van de opvulling zijn uitgewerkt in de standaardprocedurevoor het opvullen van groeven en graverijen. Hierin wordt als mogelijkheid voor het bepalen van toetsingswaarden voor de opvulling verwezen naar de methode attenuatiefactoren. Deze methode wordt in dit rapport uitgewerkt en de attenuatiefactoren voor een aantal vaststaande scenario's worden gegeven in bijlage.

Indien in de risico-analyse een toetsingswaarde wordt bepaald waaraan de aangevoerde bodemmaterialen moeten voldoen, kan deze door de deskundige worden berekend via attenuatiefactoren. De attenuatiefactoren zijn in dit rapport bepaald voor alle VLAREBO-stoffen en zijn afhankelijk van de uitloogkarakteristieken van de aangevoerde bodem en van de afstand van de groeve tot de receptor. Indien de concentratie van een stof in de aangevoerde bodemmaterialen voldoet aan de toetsingswaarde, is er geen risico voor de receptor en kan de groeve de betreffende bodem ontvangen. Indien de concentraties in de aangevoerde bodemmaterialen de toetsingswaarde overschrijden, dan kan een risico voor de receptor niet uitgesloten worden met deze methode.

# 3 BEPALEN VAN TOETSINGSWAARDEN A.H.V. ATTENUATIEFACTOREN

## 3.1 SELECTIE GRONDWATERCRITERIA

In deze stap dienen de kritische concentraties in grondwater geselecteerd te worden. De berekening die hierop volgt, heeft als uitgangspunt dat deze kritische concentratie in grondwater ter hoogte van de receptor niet overschreden wordt.

In VLAREBO bijlage IV zijn de bodemsaneringsnormen voor grondwater opgenomen. De bodemsaneringsnormen beantwoorden aan een niveau van bodemverontreiniging dat een risico inhoudt van negatieve effecten voor de mens of het milieu, gelet op de kenmerken van de bodem en de functies die deze vervult. Een overschrijding van de bodemsaneringsnormen is een signaal om een beschrijvend bodemonderzoek uit te voeren. De bodemsaneringsnormen voor grondwater liggen op het niveau van de drinkwaterkwaliteitsnorm.

Voor de VLAREBO parameters zijn er op basis van de bodemsaneringsnormen voor grondwater uit VLAREBO attenuatiefactoren berekend en opgenomen in bijlage B en C (zie volgende paragrafen).

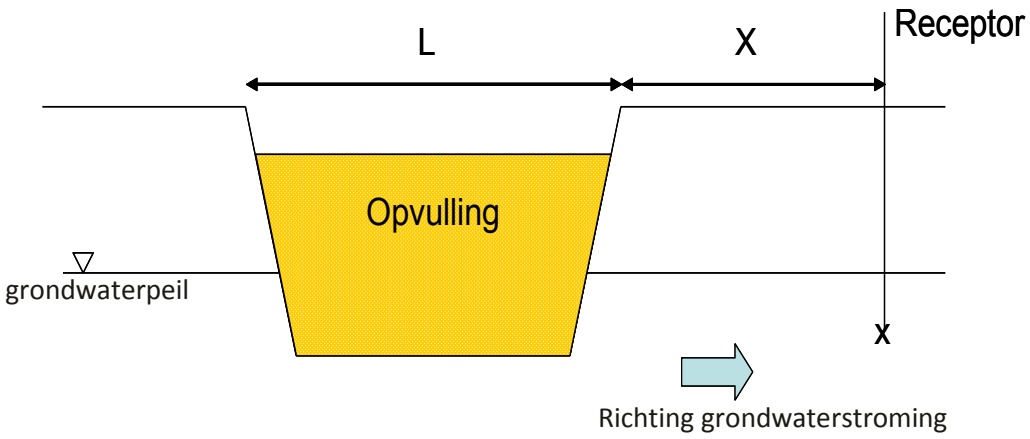
In VLAREM II bijlage 2.4.1 zijn milieukwaliteitsnormen voor grondwater opgenomen. Voor een lijst van fysisch-chemische parameters, ongewenste stoffen, toxische stoffen en microbiologische parameters zijn er richtwaarden opgenomen (art. 1). Daarnaast zijn er voor een aantal metalen en kationen per grondwaterlichaam achtergrondniveaus (art. 2) en drempelwaarden (art. 3) vastgelegd. Als milieukwaliteitsnormen voor de beoordeling van de chemische toestand van grondwater gelden de minst strenge van de richtwaarden uit artikel 1 en de achtergrondniveaus uit artikel 2. Drempelwaarden zijn zodanig vastgesteld dat, als de meetresultaten in een representatief meetpunt de drempelwaarden overschrijden, dat wijst op een risico dat er niet is voldaan aan een of meer van de voorwaarden voor een goede chemische toestand van het grondwaterlichaam.

Voor As, Cd, Ni, Pb, Zn, fluoranteen, benzo(a)pyreen, benzo(b)fluoranteen, benzo(g,h,i)peryleen, benzo(k)fluoranteen, indeno(1,2,3-cd)pyreen, tetrachlooretheen, trichlooretheen en PCB zijn er op basis van deze normen uit VLAREM II attenuatiefactoren berekend en opgenomen in bijlage D en E (zie volgende paragrafen).

## 3.2 BEPALEN VAN DE ATTENUATIE TUSSEN OPVULLING EN RECEPTOR

Een stof die uitloogt uit het opvulmateriaal wordt verdund op haar weg naar de receptor. De verdunning wordt uitgedrukt onder de vorm van attenuatiefactoren. In de analyse wordt onderscheid gemaakt tussen opvulling geheel of gedeeltelijk in verzadigde zone enerzijds (Figuur 1) en opvulling geheel in de onverzadigde zone anderzijds (Figuur 2).

### 3.2.1 Opvulling geheel of gedeeltelijk in de verzadigde zone



Figuur 1: Schematische voorstelling van een opvulling in de verzadigde zone

Attenuatiefactoren voor diverse scenario's zijn gegeven in Tabel 1, Tabel 2 en Bijlage B en D. De attenuatiefactoren worden gegeven voor de verschillende types groeven, i.c. zand, leem, klei en grind, en voor verschillende groottes van groeven. Daarnaast werden de attenuatiefactoren berekend voor 3 verschillende afstanden tot de receptor. Bij het vastleggen van de scenario's is uitgegaan van concentraties in het grondwater gelijk aan de streefwaarde zoals vastgelegd in Bijlage 3 van VLAREBO voor de metalen of de achtergrondniveaus uit Bijlage 2.4.1 VLAREM II en gelijk aan 0 voor de overige VLAREBO-stoffen. De Kd-waarden uit Tabel 2 zijn gehanteerd voor de aquifers in zand, leem klei en grind. Indien uit de inventarisatiefase blijkt dat de situatie zeer sterk afwijkt van deze assumpties (bv. een zeer lage pH in het grondwater ten gevolge van menselijk ingrijpen) en dat de werkelijke Kd-waarden aanzienlijk lager liggen dan deze uit de tabel, kunnen de berekende AF niet toegepast worden. In dergelijke situaties kan men de AF gelijk aan 1 stellen (minimale waarde en zeker beschermend genoeg).

| Parameter | Grind | Zand | Leem | Klei |
|---|---|---|---|---|
| pH | | 5,5 | 6,0 | 6,5 |
| organische koolstof (kg/kg) | | 0,001 | 0,001 | 0,001 |
| klei (%) | | 5 | 10 | 20 |
| $K_d$ As (L/kg) | 20 | 364 | 871 | 2086 |
| $K_d$ Cd (L/kg) | 20 | 219 | 372 | 631 |
| $K_d$ Cr (L/kg) | 20 | 6166 | 8511 | 11749 |
| $K_d$ Cu (L/kg) | 20 | 65 | 85 | 112 |
| $K_d$ Hg (L/kg) | 20 | 5706 | 5706 | 5706 |
| $K_d$ Pb (L/kg) | 20 | 17000 | 29543 | 51339 |
| $K_d$ Ni (L/kg) | 20 | 484 | 646 | 861 |
| $K_d$ Zn (L/kg) | 20 | 184 | 372 | 750 |

Tabel 1: Representatieve geochemische eigenschappen voor aquifermaterialen

De attenuatiefactoren werden berekend aan de hand van een stoftransportmodel (zie bijlage A). Het verspreidingsmodel berekent de attenuatie (door verdunning, dispersie, sorptie, vervluchtiging en/of afbraak) van een contaminant op de weg tussen de opvulling en de receptor. Op die manier wordt de uitloogconcentratie $C_0$ door het model vertaald naar een maximale concentratie $c_{max,receptor}$ die in het grondwater (op termijn) kan bereikt worden ter hoogte van de receptor. De verhouding van de twee concentraties is de attenuatiefactor $AF_{grondwater}$:

$$AF = AF_{grondwater} = \frac{c_o}{c_{\max,receptor}}$$

De berekende $AF_{grondwater}$ voor metalen verschilt naargelang type van aquifer (grind, zand, leem of klei), geselecteerd grondwatercriterium en afstand tot de receptor (30 m<X<100 m; 100 m<X<200 m; X>200 m). Deze tabellen zijn weergegeven in Bijlage B en D en in Tabel 2 staan ter illustratie de waarden voor Cd in een zandige aquifer voor verschillende afstanden tot de receptor. In de tabellen zijn zones afgebakend (grijze

cursief gedrukte gebieden) waar de $AF_{grondwater}$ zo hoog is dat de berekende toetsingswaarde hoger ligt dan bodemsaneringsnorm type III d.w.z. dat onder deze scenario's alle concentraties lager dan BSN type III geen aanleiding geven tot overschrijding van de bodemsaneringsnorm voor grondwater aan de receptor en dat de BSN type III dus beschermend genoeg is voor de receptor.

a) 30 m<X<100 m

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 7.7 | 4.3 | 1.3 | 1.0 | *1.0* | *1.0* |
| **10-50** | 2.3 | 1.4 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.4 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

b) 100 m<X<200 m

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 15.5 | 8.0 | 1.9 | 1.1 | *1.0* | *1.0* |
| **10-50** | 4.7 | 2.8 | 1.1 | 1.0 | *1.0* | *1.0* |
| **50-100** | 2.9 | 1.7 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.7 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.3 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

c) X>200 m

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 19.2 | 9.9 | 2.2 | 1.2 | *1.0* | *1.0* |
| **10-50** | 8.0 | 3.9 | 1.3 | 1.0 | *1.0* | *1.0* |
| **50-100** | 4.3 | 2.5 | 1.1 | 1.0 | *1.0* | *1.0* |
| **100-200** | 2.5 | 1.5 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.9 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.3 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

Tabel 2: Attenuatiefactoren voor verspreiding van Cd in een zandige aquifer

De berekende $AF_{grondwater}$ voor PAK's (behalve naftaleen), VOCl, cyanides, hexaan, heptaan en octaan verschillen in functie van de grootte van de groeve, het gehalte organische koolstof van het opvulmateriaal en de afstand tot de receptor. Onderlinge verschillen zijn klein en enkel bepaald door de $K_{OC}$-waarde van de stof.

De waarden voor antraceen staan in Tabel 3 en alle waarden staan in Bijlage B en D, waar tevens de scenario's zijn aangeduid waarvoor het respecteren van BSN type III voldoende is om geen overschrijding van de bodemsaneringsnorm voor grondwater te hebben aan de receptor.

a) 30 m<X<100 m

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *2.7* | *1.6* | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

b) 100 m<X<200 m

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.8* | *3.5* | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | 1.7 | *1.2* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

c) X>200 m

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.2* | *5.7* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | *2.5* | *1.5* | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

Tabel 2: Attenuatiefactoren voor verspreiding in grondwater van antraceen

Voor benzeen, tolueen, ethylbenzeen, xylenen, styreen, MTBE en naftaleen is degradatie in het grondwater (tijdens het traject van groeve tot receptor) in rekening gebracht. De afbraak wordt beschouwd als een eerste orde reactie met snelheidsconstanten weergegeven in Tabel 4. Deze constanten zijn de minimale waarden teruggevonden in literatuur (Suthersan, 1996) en vertegenwoordigen een conservatieve schatting van de degradatie van deze stoffen.

| Stof | Snelheidsconstante *k* ($j^{-1}$) |
|---|---|
| benzeen | 0,3514 |
| tolueen | 9,0357 |
| ethylbenzeen | 1,1096 |
| xylenen | 0,7028 |

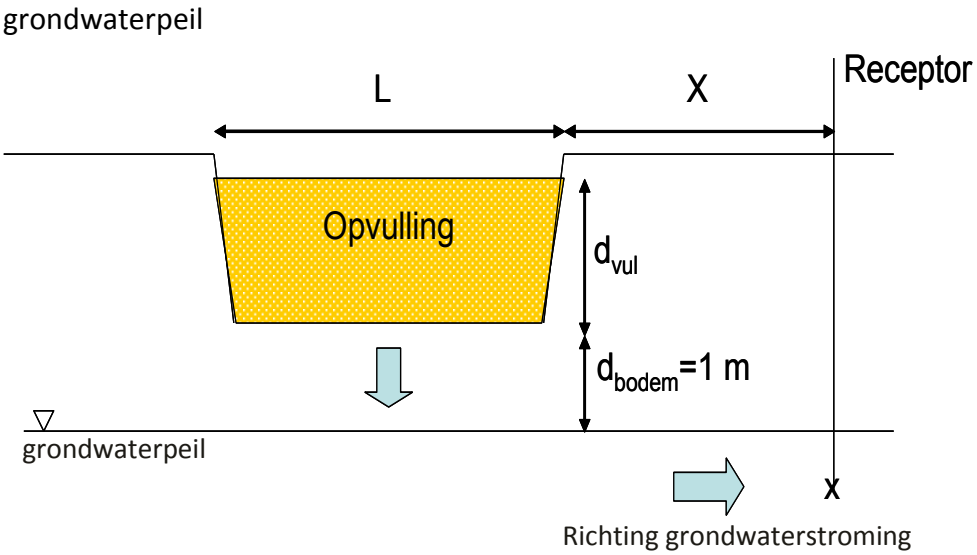
| | |
|---|---|
| styreen | 1,2048 |
| MTBE | 0.7028 |
| naftaleen | 0,9806 |

Tabel 4: Literatuurwaarden voor de snelheidsconstanten voor eerste orde afbraak van BTEXS, MTBE en naftaleen (naar Suthersan, 1996)

De berekende $AF_{grondwater}$ voor benzeen, tolueen, ethylbenzeen, xylenen, styreen, MTBE en naftaleen staan in Bijlage B, waar de scenario's zijn aangeduid waarvoor het respecteren van BSN type III voldoende is om overschrijding van de BSN grondwater aan de receptor te voorkomen. Uit Bijlage B blijkt dat voor tolueen de bodemsaneringsnormen voor elke grootte van groeve en $f_{oc}$ beschermend genoeg zijn voor elke receptor. Voor ethylbenzeen, xylenen, styreen, naftaleen en MTBE zijn de bodemsaneringsnormen beschermend genoeg voor een receptor indien de receptor op een afstand van 200 m of meer ligt.

### 3.2.2 Opvulling geheel in de onverzadigde zone (boven de natuurlijke grondwatertafel)

Voor een opvulling die zich volledig in de onverzadigde zone bevindt, dient de bijkomende attenuatie ten gevolge van transport door de bodem naar het grondwater bepaald te worden. Een schematische voorstelling van een opvulling in de onverzadigde zone is gegeven in Figuur 2.




Figuur 2: Schematische voorstelling van een opvulling in de onverzadigde zone

Bij de berekening van attenuatiefactoren is gebruik gemaakt van hetzelfde verspreidingsmodel om attenuatie te berekenen van de toepassing tot aan de grondwatertafel (zie Bijlage A). Een standaardafstand van 1 m tussen de opvulling en de grondwatertafel is gehanteerd. Naast sorptie en dispersie is ook vervluchtiging in rekening gebracht. Met afbraak is in deze scenario's geen rekening gehouden.

Attenuatiefactoren voor diverse scenario's zijn gegeven in Bijlage C en E. De attenuatiefactoren worden gegeven voor de verschillende diktes van opvulling en verschillende types van bodem (gekarakteriseerd door de $K_d$ bodem waarde/$f_{oc}$ bodem waarde). Bij de berekening van de $AF_{bodem}$-waarden is uitgegaan van concentraties in de onderliggende bodem gelijk aan de streefwaarde (zoals vastgelegd in Bijlage III van Vlarebo) of achtergrondniveau (Bijlage 2.4.1 van VLAREM II) voor de metalen en gelijk aan 0 voor de overige Vlarebo-stoffen. Ook wordt verondersteld dat infiltratie in de bodem homogeen en verticaal plaatsvindt met een infiltratie flux van 265 mm/j. Indien uit de inventarisatiefase blijkt dat de situatie zeer sterk afwijkt van deze assumpties (bv. scheuren of spleten in de onderliggende bodemlaag) kunnen de berekende $AF_{bodem}$ niet toegepast worden. In dergelijke situaties kan men de $AF_{bodem}$ gelijk aan 1 stellen (minimale waarde en zeker beschermend genoeg).

De globale attenuatie voor een opvulling geheel in de onverzadigde zone wordt bepaald door de attenuatie in de (onverzadigde) bodem te vermenigvuldigen met de attenuatie in het grondwater:

$$AF = AF_{grondwater} AF_{bodem}$$

## 3.3 BEREKENING VAN DE TOELAATBARE CONCENTRATIE IN DE OPVULLING

Eens de attenuatiefactor gekend, kan de kritische grondwaterconcentratie $c_{gw,c}$ teruggerekend worden naar een toetsingswaarde voor het opvulmateriaal, een toelaatbare totaalconcentratie $c_{0,max}$ (mg/kg DS).

$$c_{o,\max} = c_{gw,c} AF(K_d + \theta / \rho)$$

Met

| | |
|---|---|
| $c_{0,max}$ | toetsingswaarde voor totaalconcentratie in de opvulling (mg/kg DS) |
| $c_{gw,c}$ | kritische grondwaterconcentratie (mg/L) |
| AF | globale attenuatiefactor (zie vgl. 7) |
| Kd | bodem-water verdelingscoëfficiënt van de aangevoerde bodem (L/kg) |
| $\theta$ | volumetrisch vochtgehalte van de aangevoerde bodem (L/L) |
| $\rho$ | droge stofdichtheid van de aangevoerde bodem (kg/L). |

Van een partij aangevoerde bodemmaterialen dienen dus zowel de $K_d$ als de totaalconcentratie gekend te zijn om evaluatie van het bodemmateriaal toe te laten. Op basis van de AF (tabellen in bijlage B en bijlage C) en de $K_d$ kan de toetsingswaarde $c_{0,max}$ berekend worden. De toetsingswaarde dient nog bijgesteld te worden op basis van de waarde voor vrij gebruik en op basis van de bodemsaneringsnorm van toepassing op de groeve. Indien de berekende toetsingswaarde lager ligt dan de waarde voor vrij gebruik, dient de waarde voor vrij gebruik toegepast te worden. Indien de toetsingswaarde hoger ligt dan de waarde voor vrij gebruik, dan moet aan volgende voldaan worden.

$$TW = MIN(MAX(c_{0,\max}; WVG); 80\% BSNI)$$ voor bestemmingstype I

$TW = MIN(MAX(c_{0,\max};WVG);80\%BSNII)$ voor bestemmingstype II
$TW = MIN(MAX(c_{0,\max};WVG);80\%BSNIII)$ voor bestemmingstype III
$TW = MIN(MAX(c_{0,\max};WVG);BSNIII)$ voor bestemmingstype IV
$TW = MIN(MAX(c_{0,\max};WVG);BSNIII)$ voor bestemmingstype V

Indien de gemeten totaalconcentratie deze toetsingswaarde TW niet overschrijdt, vormen de aangevoerde bodemmaterialen geen risico voor overschrijding van de kritische grondwaterconcentratie in de receptor. Indien de gemeten totaalconcentratie de toetsingswaarde overschrijdt, voldoen de aangevoerde bodemmaterialen niet en kan risico voor de receptor niet uitgesloten worden.

## 3.4 VOORBEELDBEREKENING

### 3.4.1 Bepalen van de attenuatie tussen opvulling en receptor

De methodiek voor het berekenen van toetsingswaarden wordt geïllustreerd aan de hand van het voorbeeld van een leemgroeve. Uit het hydrogeologisch model wordt afgeleid dat de groeve een lengte L van 88 m heeft in de richting van de grondwaterstroming. Op 75 m van de rand van de groeve (in de richting van de grondwaterstroming) ligt een grondwateronttrekking die als receptor geïdentificeerd is in de voorstudie. De groeve ligt in bestemmingstype IV, heeft een diepte van 9 m en is volledig in de onverzadigde zone gelegen, met een laag van 2,5 m dikte tussen de bodem van de groeve en de natuurlijke grondwatertafel. Deze laag is gekarakteriseerd tijdens eerste fase van de studie en heeft een pH van 6,2, een kleigehalte van 11,9% en een organische stofgehalte van 2%. A.h.v. deze gegevens worden Kd-waarden voor de bodemlaag afgeleid.

**Invoer**

L=88 m
X=75 m
$d_{vul}$=9 m

%OC,bodem = 2

$K_{d,bodem}$ As = 1080 l/kg
$K_{d,bodem}$ Cd = 459 l/kg
$K_{d,bodem}$ Cr = 9680 l/kg
$K_{d,bodem}$ Cu = 763 l/kg
$K_{d,bodem}$ Hg = 5710 l/kg
$K_{d,bodem}$ Pb = 36900 l/kg
$K_{d,bodem}$ Ni = 724 l/kg
$K_{d,bodem}$ Zn = 492 l/kg

Op basis van deze gegevens en de AF-factoren uit Bijlage B en C kan Tabel 4 opgesteld. Deze tabel geeft voor alle VLAREBO-stoffen de AF-waarden karakteristiek voor de groeve in functie van de Kd/foc-waarde van het vulmateriaal.

| $AF_{grondwater}$ | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L = 88 m** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| As | 4.2 | 2.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| Cd | 2.0 | 1.3 | 1.0 | 1.0 | *1.0* | *1.0* |
| Cr | 33.7 | 17.4 | 3.8 | 2.1 | 1.3 | *1.0* |
| Cu | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| Hg | 25.4 | 13.1 | 2.9 | 1.7 | 1.2 | *1.0* |
| Ni | 3.2 | 1.8 | 1.0 | 1.0 | 1.0 | *1.0* |
| Pb | >100 | 55.5 | 11.7 | 5.9 | 3.2 | 1.6 |
| Zn | 2.0 | 1.3 | 1.0 | *1.0* | *1.0* | *1.0* |
| $AF_{grondwater}$ | %OC,vul | | | | | |
| **L = 88 m** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| benzeen | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| ethylbenzeen | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | *3.4* |
| tolueen | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| xyleen | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | *2.2* |
| styreen | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | *3.8* |
| hexaan | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| heptaan | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| octaan | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| MTBE | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| acenafteen | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| acenaftyleen | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| antraceen | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| benzo(a)antraceen | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| benzo(a)pyreen | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| benzo(b)fluoranteen | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| benzo(ghi)peryleen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| benzo(k)fluoranteen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| chryseen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| dibenz(a,h)antraceen | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| fenantreen | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| fluoranteen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| fluoreen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| indeno(123-cd)pyreen | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| naftaleen | 3.0 | 3.0 | 3.0 | 3.0 | *3.0* | *3.0* |
| pyreen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 1,1,1-trichloorethaan | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,1,2-trichloorethaan | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,1-dichloorethaan | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,2-dichloorbenzeen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,2-dichloorethaan | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,3-dichloorbenzeen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,4-dichloorbenzeen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| cis-1,2-dichlooretheen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| dichloormethaan | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| hexachloorbenzeen | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| monochloorbenzeen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| pentachloorbenzeen | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| tetrachloorbenzeen | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| tetrachlooretheen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| tetrachloormethaan | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| trans-1,2-dichlooretheen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| trichloorbenzeen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| trichlooretheen | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| trichloormethaan | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| vinylchloride | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| cyanide | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **$AF_{bodem}$** | **$K_{d,vul}$ (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **$d_{vul}$ = 9 m** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| As ($K_d$ 1080 l/kg) | 2.6 | 1.6 | 1.0 | 1.0 | 1.0 | 1.0 |
| Cd ($K_d$ 459 l/kg) | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| Cr ($K_d$ 9680 l/kg) | 6.8 | 3.0 | 1.1 | 1.0 | 1.0 | *1.0* |
| Cu ($K_d$ 763 l/kg) | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| Hg ($K_d$ 5710 l/kg) | 7.0 | 3.0 | 1.1 | 1.0 | 1.0 | *1.0* |
| Ni ($K_d$ 724 l/kg) | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| Pb ($K_d$ 36900 l/kg) | 6.9 | 3.0 | 1.1 | 1.0 | 1.0 | 1.0 |
| Zn ($K_d$ 492 l/kg) | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| | **%OC,vul** | | | | | |
| **$\%OC_{,bodem}$ = 2** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| benzeen | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| ethylbenzeen | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| tolueen | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| xyleen | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| styreen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| hexaan | 3.3 | 2.2 | 1.4 | *1.2* | *1.0* | *1.0* |
| heptaan | *3.6* | *2.1* | *1.3* | *1.1* | *1.1* | *1.0* |
| octaan | 2.6 | 1.6 | 1.2 | 1.1 | *30.0* | *10.0* |
| MTBE | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| acenafteen | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| acenaftyleen | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| antraceen | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| benzo(a)antraceen | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| benzo(a)pyreen | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| benzo(b)fluoranteen | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| benzo(ghi)peryleen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| benzo(k)fluoranteen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| chryseen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| dibenz(ah)antraceen | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| fenantreen | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| fluoranteen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| fluoreen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| indeno(123-cd)pyreen | 1.1 | 1.1 | 1.1 | 1.0 | *1.0* | *1.0* |
| naftaleen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| pyreen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 1,1,1-trichloorethaan | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| 1,1,2-trichloorethaan | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,1-dichloorethaan | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| 1,2-dichloorbenzeen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1,2-dichloorethaan | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,3-dichloorbenzeen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1,4-dichloorbenzeen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| cis-1,2-dichlooretheen | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| dichloormethaan | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| hexachloorbenzeen | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| monochloorbenzeen | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| pentachloorbenzeen | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| tetrachloorbenzeen | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| tetrachlooretheen | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| tetrachloormethaan | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| trans-1,2-dichlooretheen | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| trichloorbenzeen | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| trichlooretheen | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| trichloormethaan | 1.2 | 1.1 | 1.1 | *1.0* | *1.0* | *1.0* |
| vinylchloride | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.0 |
| cyanide | 2.8 | 1.7 | 1.2 | 1.1 | 1.0 | 1.0 |

Tabel 4: Attenuatie-factoren karakteristiek voor de groeve.

### 3.4.2 Berekening van de toelaatbare concentratie in de opvulling

Men zou de groeve willen opvullen met bodem die een pH van 5, een kleigehalte van 7,8% en een organische stofgehalte van 1,8% heeft. Op basis van deze gegevens wordt de Kd-waarde van de verschillende metalen geschat op basis van de relaties uit Tabel 3. Uit Tabel 4 kunnen dan de juiste AF-factoren geselecteerd worden en kan de maximaal toelaatbare concentratie in het vulmateriaal berekend worden. De berekende waarde wordt nog bijgesteld indien ze lager dan de waarde voor vrij gebruik of hoger dan 80% van de bodemsaneringsnorm (voor bestemmingstype I-III) of hoger dan bodemsaneringsnorm type III ligt (voor bestemmingstype IV-V). Het resultaat is voor elke Vlarebo-stof een toetsingswaarde waaraan de totaalconcentratie in het vulmateriaal moet voldoen om risico voor de receptor te kunnen uitsluiten (zie Tabel 5). In dit geval wordt als kritische concentratie in grondwater de bodemsaneringsnorm voor grondwater gehanteerd.

**Invoer**

$\%OC_{,vul}$= 1.8

$K_{d,vul}$ As = 637 l/kg
$K_{d,vul}$ Cd = 129 l/kg
$K_{d,vul}$ Cr = 4470 l/kg
$K_{d,vul}$ Cu = 360 l/kg
$K_{d,vul}$ Hg = 5710 l/kg
$K_{d,vul}$ Pb = 9780 l/kg
$K_{d,vul}$ Ni = 363 l/kg
$K_{d,vul}$ Zn = 91.2 l/kg

| | $AF_{grondwater}$ | $AF_{bodem}$ | AF | $C_{gw,c}$ µg/l | $C_{0,max}$ mg/kg | WVG mg/kg | BSNIII mg/kg | TW mg/kg |
|---|---|---|---|---|---|---|---|---|
| As | 1.0 | 1.0 | 1.0 | 20 | 12.7 | 35 | 103 | 35 |
| Cd | 1.0 | 1.0 | 1.0 | 5 | 0.6 | 1.2 | 6 | 1.2 |
| Cr | *1.0* | *1.0* | - | 50 | - | 91 | 240 | 240 |
| Cu | 1.0 | 1.0 | 1.0 | 100 | 36.0 | 72 | 197 | 72 |
| Hg | *1.0* | *1.0* | - | 1 | - | 1.7 | 4.8 | 4.8 |
| Ni | 1.0 | 1.0 | 1.0 | 40 | 14.5 | 120 | 560 | 120 |
| Pb | 1.6 | 1.0 | 1.6 | 20 | 313 | 56 | 95 | 95 |
| Zn | 1.3 | 1.0 | 1.3 | 500 | 59.4 | 200 | 333 | 200 |
| benzeen | 1.5 | 1.0 | 1.5 | 10 | 0.02 | 0.3 | 0.5 | 0.3 |
| ethylbenzeen | 3.4 | 1.0 | 3.4 | 300 | 3.8 | 0.8 | 10 | 3.8 |
| tolueen | *>100* | 1.0 | - | 700 | - | 1.6 | 7 | 7 |
| xyleen | 2.2 | 1.0 | 2.2 | 500 | 4.0 | 1.2 | 11 | 4.0 |
| styreen | 3.8 | 1.0 | 3.8 | 20 | 1.0 | 0.32 | 3 | 1.0 |
| hexaan | *1.0* | *1.2* | - | 180 | - | 0.6 | 1.5 | 1.5 |
| heptaan | *1.0* | *1.1* | - | 3000 | - | 10 | 25 | 25 |
| octaan | 1.0 | 1.1 | 1.1 | 600 | 135 | 30 | 90 | 90 |
| MTBE | 2.2 | 1.0 | 2.2 | 300 | 0.2 | 1 | 9 | 1 |
| acenafteen | *1.0* | *1.0* | - | 180 | - | 4.6 | 14 | 14 |
| acenaftyleen | *1.0* | *1.0* | - | 70 | - | 0.6 | 1 | 1 |
| antraceen | *1.0* | *1.0* | - | 75 | - | 1.5 | 70 | 70 |
| benzo(a)antraceen | *1.0* | *1.0* | - | 7 | - | 2.5 | 10.5 | 10.5 |
| benzo(a)pyreen | *1.0* | *1.0* | - | 0.7 | - | 0.3 | 3.6 | 3.6 |
| benzo(b)fluoranteen | 1.0 | 1.0 | 1.0 | 1.2 | 11.7 | 1.1 | 7 | 7 |
| benzo(ghi)peryleen | 1.0 | 1.0 | 1.0 | 0.26 | 1.9 | 35 | 3920 | 35 |
| benzo(k)fluoranteen | 1.0 | 1.0 | 1.0 | 0.76 | 6.3 | 0.6 | 11.5 | 6.3 |
| chryseen | 1.0 | 1.0 | 1.0 | 1.5 | 14.2 | 5.1 | 180 | 14.2 |
| dibenz(a,h)antraceen | *1.0* | *1.0* | - | 0.5 | - | 0.3 | 2.9 | 2.9 |
| fenantreen | 1.0 | 1.0 | 1.0 | 120 | 88 | 30 | 65 | 65 |
| fluoranteen | 1.0 | 1.0 | 1.0 | 4 | 12 | 10.1 | 30 | 12 |
| fluoreen | 1.0 | 1.0 | 1.0 | 120 | 53 | 19 | 3950 | 53 |
| indeno(123-cd)pyreen | 1.0 | 1.0 | 1.0 | 0.1 | 20 | 0.55 | 20 | 20 |
| naftaleen | 3.0 | 1.0 | 3.0 | 60 | 4.8 | 0.8 | 5 | 4.8 |
| pyreen | 1.0 | 1.0 | 1.0 | 90 | 123 | 62 | 395 | 123 |
| 1,1,1-trichloorethaan | 1.0 | 1.0 | 1.0 | 500 | 1 | 4 | 13 | 4 |
| 1,1,2-trichloorethaan | 1.0 | 1.0 | 1.0 | 12 | 0.02 | 0.08 | 0.6 | 0.08 |
| 1,1-dichloorethaan | 1.0 | 1.0 | 1.0 | 330 | 0.25 | 0.08 | 5 | 0.25 |
| 1,2-dichloorbenzeen | 1.0 | 1.0 | 1.0 | 1000 | 9.45 | 14 | 110 | 14 |
| 1,2-dichloorethaan | 1.0 | 1.0 | 1.0 | 30 | 0.02 | 0.06 | 0.1 | 0.06 |
| 1,3-dichloorbenzeen | 1.0 | 1.0 | 1.0 | 1000 | 18 | 16 | 140 | 18 |
| 1,4-dichloorbenzeen | 1.0 | 1.0 | 1.0 | 300 | 2.7 | 1.6 | 15 | 2.7 |
| cis-1,2-dichlooretheen | 1.0 | 1.0 | 1.0 | 50 | 0.05 | 0.16 | 0.7 | 0.16 |
| dichloormethaan | 1.0 | 1.0 | 1.0 | 20 | 0.01 | 0.05 | 0.35 | 0.05 |
| hexachloorbenzeen | *1.0* | *1.0* | - | 1 | - | 0.06 | 0.1 | 0.1 |
| monochloorbenzeen | 1.0 | 1.0 | 1.0 | 300 | 1 | 1 | 8 | 1 |
| pentachloorbenzeen | *1.0* | *1.0* | - | 2.4 | - | 0.2 | 1.3 | 1.3 |
| tetrachloorbenzeen | *1.0* | *1.0* | - | 9 | - | 0.04 | 0.3 | 0.3 |
| tetrachlooretheen | 1.0 | 1.0 | 1.0 | 40 | 0.20 | 0.28 | 1.4 | 0.28 |
| tetrachloormethaan | 1.0 | 1.0 | 1.0 | 2 | 0.01 | 0.04 | 0.1 | 0.04 |
| trans-1,2-dichlooretheen | 1.0 | 1.0 | 1.0 | 50 | 0.05 | 0.16 | 0.7 | 0.16 |

| | $AF_{grondwater}$ | $AF_{bodem}$ | AF | $C_{gw,c}$ µg/l | $C_{0,max}$ mg/kg | WVG mg/kg | BSNIII mg/kg | TW mg/kg |
|---|---|---|---|---|---|---|---|---|
| trichloorbenzeen | 1.0 | 1.0 | 1.0 | 20 | 0.56 | 0.2 | 2 | 0.56 |
| trichlooretheen | 1.0 | 1.0 | 1.0 | 70 | 0.12 | 0.26 | 1.4 | 0.26 |
| trichloormethaan | *1.0* | *1.0* | - | 200 | - | 0.06 | 0.1 | 0.1 |
| vinylchloride | 1.0 | 1.5 | 1.5 | 5 | 0.003 | 0.06 | 0.1 | 0.06 |
| vrij cyanide | 1.0 | 1.1 | 1.1 | 70 | 1 | 3 | 5 | 3 |

Tabel 5: Toetsingswaarden voor de groeve en het vulmateriaal.

# 4 REFERENTIES

CMA, 2005. Compendium voor monsterneming en analyse (CMA) in uitvoering van het afvalstoffendecreet en het bodemsaneringsdecreet. Ontwerpversie.

VITO, 2004. Best beschikbare technieken voor de ontginning van zand, grind, leem en klei. Studie uitgevoerd door het Vlaams kenniscentrum voor Best Beschikbare Technieken in opdracht van het Vlaamse Gewest. 159 pp.

Smolders, E., Degryse, F., De Brouwere, K., Van Den Brande, K., Cornelis, C., Seuntjens, P. (2000). Bepaling van veldgemeten verdelingsfactoren van zware metalen bij bodemverontreiniging in Vlaanderen. Rapport in opdracht van OVAM, Mechelen, België.

Suthersan, S.S. (1996). Remediation Engineering. 384pp., Lewis Publishers Inc.

# BIJLAGE A: BEPALING VAN DE ATTENUATIEFACTOR

Het grondwater verspreidingsmodel gaat uit van een evenwichtsverdeling van de contaminant tussen de vaste fase, vloeibare fase en lucht van de bodem en brengt volgende processen in rekening:

- convectie: beweging met het bodem- en grondwater
- diffusie: in de water- en luchtfase
- dispersie: spreiding ten gevolge van het poreuze en heterogene karakter van de bodemmatrix
- vervluchtiging

De verspreiding van contaminanten in het bodem/grondwater continuüm wordt wiskundig uitgedrukt onder de vorm van de convectie-dispersie vergelijking (CDE, hier weergegeven voor ééndimensionaal stoftransport):

$$\frac{\partial \theta_w C_w}{\partial t} + \frac{\partial \rho_b C_s}{\partial t} + \frac{\partial \theta_a C_a}{\partial t} = \frac{\partial}{\partial z}(\theta_w D_w \frac{\partial C_w}{\partial z}) + \frac{\partial}{\partial z}(\theta_a D_a \frac{\partial C_a}{\partial z}) - \frac{\partial q C_w}{\partial z} - \mu_w \theta_w C_w - \mu_s \rho C_s - \mu_a \theta_a C_a \quad \text{(A.1)}$$

met:

| | |
|---|---|
| $C_w$ | concentratie in de bodemoplossing (kg/m$^3$) |
| $C_a$ | concentratie in de bodemlucht (kg/m$^3$) |
| $C_s$ | concentratie op de vaste fase (kg/kg) |
| $D_w$ | longitudinale hydrodynamische dispersiecoëfficiënt (m$^2$/s) |
| $D_a$ | effectieve diffusiecoëfficiënt (m$^2$/s) |
| q | Darcy waterflux (m/s) |
| $\rho$ | schijnbare droge dichtheid (kg/m$^3$) |
| $\theta_w$ | volumetrisch vochtgehalte (m$^3$/m$^3$) |
| $\theta_a$ | volumetrisch luchtgehalte (m$^3$/m$^3$) |
| $\mu_w$, $\mu_a$, $\mu_s$ | eerste-orde afbraakconstanten in de water-, lucht- en vaste fase (1/s) |
| z | de afstand tot de rand (m) |
| t | de tijd (s) |

De wiskundige oplossing van de CDE voorspelt de contaminantconcentratie C(z,t) op plaats z op tijd t voor een gegeven initiële conditie (bij toepassing van een opvulling de concentratie in het ontvangende bodem- en grondwater) en gekende randvoorwaarden aan de bovenste rand (infiltratieflux gelijk aan het neerslagsurplus, een exponentiëel dalende concentratieterm).

Het model berekent aldus de concentratie van de contaminant aan de onderzijde van het bodemprofiel (met toepassing NV bouwstof). Daaruit wordt de concentratie in het grondwater berekend door volledige menging te veronderstellen van de concentraties die uitlogen uit de bodem met het grondwater dat een bepaalde

gemeten initiële concentratie heeft. De grondwaterconcentratie onder de beschouwde toepassing wordt dan gegeven door:

$$C_{gw,n} = \frac{C_{w,n} Lq + C_{gw,0} kih}{qL + kih}$$

Met:

| | |
|---|---|
| $C_{gw}$ | concentratie in het grondwater (µg/l) |
| $C_w$ | concentratie aan de onderzijde van het bodemprofiel (µg/l) |
| $C_{gw,0}$ | initiële grondwaterconcentratie (stroomopwaarts van terrein) (µg/l) |
| L | lengte van de toepassing in stromingsrichting van het grondwater (m) |
| Q | infiltratieflux (m/j) |
| k | verzadigde doorlaatbaarheid van de aquifer (m/j) |
| i | verhang van de aquifer (m/m) |
| h | menghoogte in de watervoerende laag (m) |

De aldus berekende grondwaterconcentratie die ontstaat ten gevolge van uitloging uit de bodem, wordt vervolgens als randvoorwaarde gebruikt voor de verspreidingsberekeningen in grondwater. Vergelijking A.1 wordt dus zowel voor verspreiding in de onverzadigde zone als de verzadigde zone gebruikt.

# BIJLAGE B: ATTENUATIEFACTOR VOOR VERSPREIDING IN GRONDWATER MET MKN UIT VLAREBO

Volgende tabellen geven $AF_{grondwater}$ voor de verschillende Vlarebo-parameters voor verschillende afmetingen van de groeve, types van aquifer, afstand tot de receptor en $K_d$ van het vulmateriaal. De milieukwaliteitsnorm in grondwater is de bodemsaneringsnorm voor grondwater (VLAREBO bijlage IV; ligt op het niveau van de drinkwaternorm). Binnen de tabellen zijn domeinen afgebakend (grijze cursief gedrukte gebieden) die de scenario's aflijnen waarbij concentraties lager danBSN type III geen aanleiding geven tot overschrijding van de bodemsaneringsnorm voor grondwater aan de receptor en waar een verdere berekening dus niet nodig is.

## B1 Zware metalen en metalloïden

### B1.1 Grind

**a) 30 m<X<100 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **10-50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 1.4 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **10-50** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **10-50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Cu** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **10-50** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **10-50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **10-50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| Pb | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **10-50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **10-50** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

**b) 100 m<X<200 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 2.9 | 1.7 | 1.0 | 1.0 | 1.0 | 1.0 |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 2.8 | 1.7 | 1.0 | 1.0 | *1.0* | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 2.9 | 1.7 | 1.0 | 1.0 | 1.0 | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 2.9 | 1.7 | 1.0 | 1.0 | *1.0* | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 2.9 | 1.7 | 1.0 | 1.0 | 1.0 | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 2.9 | 1.7 | 1.0 | 1.0 | 1.0 | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 2.9 | 1.7 | 1.0 | 1.0 | 1.0 | 1.0 |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 2.9 | 1.7 | 1.0 | *1.0* | *1.0* | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

**c) X>200 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 4.7 | 2.6 | 1.1 | 1.0 | 1.0 | 1.0 |
| 10-50 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 200-300 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 300-400 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 400-500 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >500 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 4.3 | 2.4 | 1.1 | 1.0 | *1.0* | *1.0* |
| 10-50 | 1.4 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 200-300 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 4.7 | 2.6 | 1.1 | 1.0 | 1.0 | *1.0* |
| 10-50 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| 50-100 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 200-300 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 300-400 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 400-500 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| >500 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 4.6 | 2.5 | 1.1 | 1.0 | *1.0* | *1.0* |
| 10-50 | 1.4 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 4.8 | 2.6 | 1.1 | 1.0 | 1.0 | *1.0* |
| **10-50** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 4.7 | 2.6 | 1.1 | 1.0 | 1.0 | *1.0* |
| **10-50** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 4.8 | 2.6 | 1.1 | 1.0 | 1.0 | 1.0 |
| **10-50** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 4.6 | 2.5 | 1.1 | *1.0* | *1.0* | *1.0* |
| **10-50** | 1.4 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

### *B1.2 Zand*

**a) 30 m<X<100 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 15.8 | 7.6 | 2.0 | 1.3 | 1.1 | 1.0 |
| **10-50** | 3.6 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 2.0 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **200-300** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 7.7 | 4.3 | 1.3 | 1.0 | *1.0* | *1.0* |
| **10-50** | 2.3 | 1.4 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.4 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *60.7* | *13.3* | *6.8* | *3.6* | *1.6* |
| **10-50** | 44.7 | 23.4 | 5.0 | 2.7 | 1.6 | *1.1* |
| **50-100** | 25.5 | 13.2 | 2.9 | 1.7 | 1.2 | *1.0* |
| **100-200** | 13.8 | 6.5 | 1.7 | 1.2 | 1.0 | *1.0* |
| **200-300** | 9.4 | 4.8 | 1.3 | 1.1 | 1.0 | *1.0* |
| **300-400** | 6.9 | 3.7 | 1.2 | 1.0 | 1.0 | *1.0* |
| **400-500** | 4.2 | 3.0 | 1.1 | 1.0 | 1.0 | *1.0* |
| **>500** | 2.8 | 1.7 | 1.0 | 1.0 | 1.0 | *1.0* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 3.3 | 1.9 | 1.0 | 1.0 | *1.0* | *1.0* |
| **10-50** | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | **$K_{d,vul}$ (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *81.6* | *20.3* | *10.6* | *5.5* | *2.5* |
| **10-50** | 44.2 | 24.0 | 5.2 | 2.8 | 1.7 | *1.1* |
| **50-100** | 24.5 | 12.9 | 2.9 | 1.7 | 1.2 | *1.0* |
| **100-200** | 13.0 | 6.7 | 1.7 | 1.2 | 1.0 | *1.0* |
| **200-300** | 8.8 | 4.5 | 1.3 | 1.1 | 1.0 | *1.0* |
| **300-400** | 6.7 | 3.2 | 1.2 | 1.0 | 1.0 | *1.0* |
| **400-500** | 5.4 | 2.9 | 1.1 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.7 | 1.6 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Ni** | **$K_{d,vul}$ (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 20.0 | 8.7 | 2.4 | 1.5 | 1.1 | *1.0* |
| **10-50** | 4.6 | 2.5 | 1.1 | 1.0 | 1.0 | *1.0* |
| **50-100** | 2.5 | 1.5 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | **$K_{d,vul}$ (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 35.0 | 17.9 | 9.1 | 3.8 |
| **10-50** | >100 | 53.9 | 12.9 | 6.7 | 3.4 | 1.7 |
| **50-100** | 57.7 | 32.6 | 7.3 | 3.7 | 2.1 | 1.2 |
| **100-200** | 34.2 | 18.2 | 3.9 | 2.2 | 1.4 | 1.0 |
| **200-300** | 24.0 | 12.6 | 2.8 | 1.6 | 1.2 | 1.0 |
| **300-400** | 18.6 | 9.7 | 2.2 | 1.4 | 1.1 | 1.0 |
| **400-500** | 15.2 | 7.9 | 1.8 | 1.2 | 1.0 | 1.0 |
| **>500** | 7.9 | 4.1 | 1.2 | 1.0 | 1.0 | 1.0 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 8.0 | 4.1 | *1.3* | *1.1* | *1.0* | *1.0* |
| **10-50** | 2.0 | 1.4 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.3 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

**b) 100 m<X<200 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 36.0 | 19.1 | 4.2 | 2.3 | 1.5 | *1.1* |
| **10-50** | 9.2 | 4.4 | 1.4 | 1.1 | 1.0 | 1.0 |
| **50-100** | 4.5 | 2.6 | 1.1 | 1.0 | 1.0 | 1.0 |
| **100-200** | 2.6 | 1.5 | 1.0 | 1.0 | 1.0 | 1.0 |
| **200-300** | 1.8 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 15.5 | 8.0 | 1.9 | 1.1 | *1.0* | *1.0* |
| **10-50** | 4.7 | 2.8 | 1.1 | 1.0 | *1.0* | *1.0* |
| **50-100** | 2.9 | 1.7 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.7 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.3 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *85.5* | *17.3* | *8.7* | *4.4* | *1.8* |
| **10-50** | 82.1 | 45.4 | *10.2* | *5.3* | *2.8* | *1.4* |
| **50-100** | 54.5 | 29.6 | 6.5 | 3.4 | 1.9 | *1.1* |
| **100-200** | 33.0 | 17.4 | 3.1 | 2.1 | 1.3 | *1.0* |
| **200-300** | 23.6 | 12.3 | 2.7 | 1.6 | 1.1 | *1.0* |
| **300-400** | 18.4 | 9.5 | 2.1 | 1.3 | 1.1 | *1.0* |
| **400-500** | 15.1 | 7.8 | 1.8 | 1.2 | 1.0 | *1.0* |
| **>500** | 7.9 | 3.5 | 1.2 | 1.0 | 1.0 | *1.0* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 7.6 | 4.2 | 1.3 | 1.1 | *1.0* | *1.0* |
| **10-50** | 2.0 | 1.3 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.3 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *>100* | *37.8* | *20.3* | *10.6* | *4.5* |
| **10-50** | *>100* | *53.5* | *13.0* | *6.7* | *3.4* | *1.7* |
| **50-100** | 55.8 | 31.6 | 7.1 | 3.6 | 2.1 | *1.2* |
| **100-200** | 32.7 | 17.4 | 3.7 | 2.1 | 1.3 | *1.0* |
| **200-300** | 22.8 | 12.0 | 2.6 | 1.5 | 1.1 | *1.0* |
| **300-400** | 17.6 | 9.2 | 2.1 | 1.3 | 1.0 | *1.0* |
| **400-500** | 14.3 | 7.4 | 1.7 | 1.2 | 1.0 | *1.0* |
| **>500** | 7.4 | 3.9 | 1.2 | 1.0 | 1.0 | *1.0* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 44.0 | 23.0 | *4.9* | *2.6* | *1.6* | *1.0* |
| **10-50** | 11.6 | 6.0 | 1.6 | 1.2 | 1.0 | *1.0* |
| **50-100** | 6.2 | 3.2 | 1.2 | 1.0 | 1.0 | *1.0* |
| **100-200** | 3.3 | 1.8 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 2.3 | 1.4 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.8 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 45.0 | 22.9 | 11.6 | 4.7 |
| **10-50** | >100 | >100 | 26.3 | 13.7 | 7.1 | 3.0 |
| **50-100** | >100 | 72.5 | 17.0 | 8.8 | 4.2 | 2.0 |
| **100-200** | 80.2 | 44.5 | 9.9 | 4.7 | 2.7 | 1.4 |
| **200-300** | 59.5 | 32.2 | 7.0 | 3.6 | 2.0 | 1.2 |
| **300-400** | 47.4 | 25.1 | 5.1 | 2.8 | 1.6 | 1.1 |
| **400-500** | 39.4 | 20.6 | 3.2 | 2.3 | 1.4 | 1.1 |
| **>500** | 21.1 | 10.9 | 2.4 | 1.4 | 1.1 | 1.1 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *18.6* | *9.8* | *2.3* | *1.5* | *1.1* | *1.0* |
| **10-50** | 4.8 | 2.6 | 1.1 | *1.0* | *1.0* | *1.0* |
| **50-100** | 2.6 | 1.6 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

**c) X>200 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 51.3 | 27.9 | 6.2 | 3.3 | 1.9 | *1.1* |
| 10-50 | 15.0 | 7.8 | 1.9 | 1.3 | 1.1 | 1.0 |
| 50-100 | 8.0 | 3.9 | 1.3 | 1.0 | 1.0 | 1.0 |
| 100-200 | 4.0 | 2.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| 200-300 | 2.9 | 1.6 | 1.0 | 1.0 | 1.0 | 1.0 |
| 300-400 | 2.2 | 1.4 | 1.0 | 1.0 | 1.0 | 1.0 |
| 400-500 | 1.9 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| >500 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 19.2 | 9.9 | 2.2 | 1.2 | *1.0* | *1.0* |
| 10-50 | 8.0 | 3.9 | 1.3 | 1.0 | *1.0* | *1.0* |
| 50-100 | 4.3 | 2.5 | 1.1 | 1.0 | *1.0* | *1.0* |
| 100-200 | 2.5 | 1.5 | 1.0 | 1.0 | *1.0* | *1.0* |
| 200-300 | 1.9 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 1.3 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | *>100* | *90.7* | *18.0* | *9.0* | *4.5* | *1.8* |
| 10-50 | *98.4* | *58.0* | *13.3* | *6.9* | *3.6* | *1.6* |
| 50-100 | 73.9 | 41.4 | 9.4 | *4.9* | *2.6* | *1.3* |
| 100-200 | 49.7 | 26.5 | 5.8 | 3.1 | 1.7 | *1.1* |
| 200-300 | 36.4 | 19.4 | 4.2 | 2.3 | 1.4 | *1.0* |
| 300-400 | 29.2 | 15.3 | 2.9 | 1.9 | 1.2 | *1.0* |
| 400-500 | 24.1 | 12.6 | 2.8 | 1.6 | 1.1 | *1.0* |
| >500 | 13.1 | 6.8 | 1.6 | 1.1 | 1.0 | *1.0* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 13.1 | 6.4 | 1.7 | 1.2 | *1.0* | *1.0* |
| 10-50 | 3.1 | 1.8 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.8 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *>100* | *50.5* | *26.5* | *13.6* | *5.6* |
| **10-50** | *>100* | *86.3* | *20.6* | *10.6* | *4.9* | *2.4* |
| **50-100** | 93.0 | *52.4* | *11.7* | *5.5* | *3.2* | *1.5* |
| **100-200** | 55.2 | 29.3 | 5.9 | 3.2 | 1.8 | *1.1* |
| **200-300** | 38.8 | 20.4 | 4.3 | 2.3 | 1.4 | *1.0* |
| **300-400** | 30.0 | 15.6 | 3.3 | 1.8 | 1.2 | *1.0* |
| **400-500** | 24.5 | 12.6 | 2.7 | 1.6 | 1.1 | *1.0* |
| **>500** | 12.7 | 6.5 | 1.6 | 1.1 | 1.0 | *1.0* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *57.4* | *31.1* | *6.9* | *3.5* | *2.0* | *1.1* |
| **10-50** | 19.0 | 9.9 | 2.3 | 1.4 | 1.1 | *1.0* |
| **50-100** | 10.4 | 5.1 | 1.4 | 1.1 | 1.0 | *1.0* |
| **100-200** | 5.3 | 2.9 | 1.1 | 1.0 | 1.0 | *1.0* |
| **200-300** | 3.7 | 2.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 2.9 | 1.6 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 2.3 | 1.4 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 47.1 | 23.7 | 11.9 | 4.8 |
| **10-50** | >100 | >100 | 39.2 | 20.0 | 10.2 | 4.3 |
| **50-100** | >100 | >100 | 32.7 | 16.9 | 8.8 | 4.0 |
| **100-200** | >100 | >100 | 25.2 | 13.4 | 7.7 | 3.9 |
| **200-300** | >100 | 91.4 | 21.0 | 11.9 | 7.3 | 3.9 |
| **300-400** | >100 | 76.9 | 18.2 | 11.0 | 7.2 | 3.9 |
| **400-500** | >100 | 66.8 | 15.6 | 10.5 | 7.1 | 3.9 |
| **>500** | 76.6 | 41.4 | 13.1 | 9.9 | 7.1 | 3.9 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *28.4* | *14.8* | *3.3* | *1.9* | *1.2* | *1.0* |
| **10-50** | 7.8 | 4.1 | 1.3 | *1.1* | *1.0* | *1.0* |
| **50-100** | 4.2 | 2.3 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 2.3 | 1.4 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.7 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.4 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

### *B1.3 Leem*

**a) 30 m<X<100 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 32.7 | 17.0 | 3.7 | 2.1 | 1.4 | *1.0* |
| **10-50** | 7.6 | 4.1 | 1.3 | 1.1 | 1.0 | 1.0 |
| **50-100** | 4.2 | 2.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| **100-200** | 2.3 | 1.4 | 1.0 | 1.0 | 1.0 | 1.0 |
| **200-300** | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 11.4 | 6.0 | 1.6 | 1.1 | *1.0* | *1.0* |
| **10-50** | 3.4 | 2.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 2.0 | 1.3 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.3 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *68.0* | *14.9* | *7.6* | *3.9* | *1.7* |
| **10-50** | 56.9 | 30.0 | 5.4 | 3.4 | 1.9 | *1.2* |
| **50-100** | 33.7 | 17.4 | 3.8 | 2.1 | 1.3 | *1.0* |
| **100-200** | 18.5 | 9.5 | 2.2 | 1.4 | 1.1 | *1.0* |
| **200-300** | 12.8 | 6.3 | 1.6 | 1.1 | 1.0 | *1.0* |
| **300-400** | 9.8 | 5.0 | 1.4 | 1.1 | 1.0 | *1.0* |
| **400-500** | 7.4 | 4.0 | 1.2 | 1.0 | 1.0 | *1.0* |
| **>500** | 4.1 | 2.2 | 1.0 | 1.0 | 1.0 | *1.0* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 4.1 | 2.3 | 1.1 | 1.0 | *1.0* | *1.0* |
| **10-50** | 1.3 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **50-100** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | **$K_{d,vul}$ (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *89.5* | *20.9* | *10.8* | *5.6* | *2.5* |
| **10-50** | 47.2 | 24.9 | 5.3 | 2.8 | 1.7 | *1.1* |
| **50-100** | 25.4 | 13.1 | 2.9 | 1.7 | 1.2 | *1.0* |
| **100-200** | 13.2 | 6.3 | 1.7 | 1.2 | 1.0 | *1.0* |
| **200-300** | 8.9 | 4.6 | 1.3 | 1.1 | 1.0 | *1.0* |
| **300-400** | 6.5 | 3.5 | 1.2 | 1.0 | 1.0 | *1.0* |
| **400-500** | 4.1 | 2.9 | 1.1 | 1.0 | 1.0 | *1.0* |
| **>500** | 2.7 | 1.6 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Ni** | **$K_{d,vul}$ (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 25.1 | 13.0 | 2.9 | 1.7 | *1.2* | *1.0* |
| **10-50** | 6.0 | 3.2 | 1.2 | 1.0 | 1.0 | *1.0* |
| **50-100** | 3.2 | 1.8 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.8 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | **$K_{d,vul}$ (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 41.0 | 21.0 | 10.7 | 4.3 |
| **10-50** | >100 | 90.5 | 20.0 | 10.1 | 5.1 | 2.3 |
| **50-100** | >100 | 55.5 | 11.7 | 5.9 | 3.2 | 1.6 |
| **100-200** | 60.0 | 31.3 | 6.4 | 3.4 | 1.9 | 1.2 |
| **200-300** | 42.2 | 21.3 | 3.2 | 2.4 | 1.5 | 1.1 |
| **300-400** | 32.5 | 16.4 | 3.5 | 1.9 | 1.3 | 1.1 |
| **400-500** | 25.7 | 13.3 | 2.8 | 1.6 | 1.2 | 1.1 |
| **>500** | 13.5 | 6.9 | 1.6 | 1.1 | 1.1 | 1.1 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *14.6* | *7.6* | *1.9* | *1.3* | *1.1* | *1.0* |
| **10-50** | 3.6 | 2.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 2.0 | 1.3 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.3 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

**b) 100 m<X<200 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 61.9 | 34.1 | 7.6 | 3.9 | 2.2 | *1.2* |
| 10-50 | 20.0 | 10.4 | 2.4 | 1.5 | 1.1 | 1.0 |
| 50-100 | 10.9 | 5.5 | 1.5 | 1.1 | 1.0 | 1.0 |
| 100-200 | 5.7 | 3.0 | 1.1 | 1.0 | 1.0 | 1.0 |
| 200-300 | 3.2 | 2.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 300-400 | 3.0 | 1.7 | 1.0 | 1.0 | 1.0 | 1.0 |
| 400-500 | 2.4 | 1.5 | 1.0 | 1.0 | 1.0 | 1.0 |
| >500 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 19.2 | 9.9 | 2.2 | 1.2 | *1.0* | *1.0* |
| 10-50 | 7.5 | 4.1 | 1.3 | 1.0 | *1.0* | *1.0* |
| 50-100 | 4.5 | 2.4 | 1.1 | 1.0 | *1.0* | *1.0* |
| 100-200 | 2.5 | 1.5 | 1.0 | 1.0 | *1.0* | *1.0* |
| 200-300 | 1.8 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 1.3 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | *>100* | *87.0* | *17.8* | *8.9* | *4.5* | *1.8* |
| 10-50 | *>100* | *54.1* | *12.1* | *6.2* | *3.3* | *1.5* |
| 50-100 | 68.1 | 37.2 | 8.1 | 3.9 | 2.3 | *1.2* |
| 100-200 | 42.8 | 22.7 | 4.5 | 2.6 | 1.5 | *1.1* |
| 200-300 | 31.3 | 16.3 | 3.5 | 1.9 | 1.3 | *1.0* |
| 300-400 | 24.5 | 12.7 | 2.7 | 1.6 | 1.1 | *1.0* |
| 400-500 | 20.2 | 10.4 | 2.3 | 1.4 | 1.1 | *1.0* |
| >500 | 10.8 | 5.4 | 1.4 | 1.1 | 1.0 | *1.0* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 10.0 | 5.3 | 1.5 | 1.1 | *1.0* | *1.0* |
| 10-50 | 2.5 | 1.5 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *>100* | *39.7* | *20.9* | *10.8* | *4.4* |
| **10-50** | *>100* | *58.7* | *13.2* | *6.5* | *3.5* | *1.7* |
| **50-100** | 61.6 | 33.2 | 7.0 | 3.7 | 2.1 | *1.2* |
| **100-200** | 34.2 | 17.9 | 3.8 | 2.1 | 1.3 | *1.0* |
| **200-300** | 23.7 | 12.2 | 2.7 | 1.5 | 1.1 | *1.0* |
| **300-400** | 18.1 | 9.3 | 2.1 | 1.3 | 1.0 | *1.0* |
| **400-500** | 14.6 | 7.5 | 1.7 | 1.2 | 1.0 | *1.0* |
| **>500** | 7.5 | 3.9 | 1.2 | 1.0 | 1.0 | *1.0* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *51.4* | *27.2* | *5.7* | *3.1* | *1.8* | *1.1* |
| **10-50** | 15.4 | 7.7 | 1.9 | 1.3 | 1.1 | *1.0* |
| **50-100** | 8.1 | 4.3 | 1.3 | 1.1 | 1.0 | *1.0* |
| **100-200** | 4.3 | 2.3 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 3.0 | 1.7 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 2.3 | 1.4 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.9 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 47.6 | 23.9 | 11.9 | 4.8 |
| **10-50** | >100 | >100 | 46.1 | 23.2 | 11.7 | 4.7 |
| **50-100** | >100 | >100 | 44.5 | 22.5 | 11.5 | 4.7 |
| **100-200** | >100 | >100 | 42.3 | 21.9 | 11.4 | 4.7 |
| **200-300** | >100 | >100 | 40.5 | 21.6 | 11.4 | 4.7 |
| **300-400** | >100 | >100 | 40.0 | 21.5 | 11.4 | 4.7 |
| **400-500** | >100 | >100 | 39.5 | 21.5 | 11.4 | 4.7 |
| **>500** | >100 | >100 | 38.8 | 21.5 | 11.4 | 4.7 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *30.0* | *15.9* | *3.5* | *2.0* | *1.3* | *1.0* |
| **10-50** | 9.0 | 4.6 | *1.4* | *1.1* | *1.0* | *1.0* |
| **50-100** | 4.8 | 2.6 | 1.1 | *1.0* | *1.0* | *1.0* |
| **100-200** | 2.6 | 1.5 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.9 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.3 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

### c) X>200 m

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 85.1 | 43.9 | 10.0 | *5.2* | *2.7* | *1.3* |
| 10-50 | 30.8 | 16.4 | 3.4 | 2.0 | 1.3 | 1.0 |
| 50-100 | 17.5 | 9.1 | 2.1 | 1.3 | 1.1 | 1.0 |
| 100-200 | 9.4 | 4.9 | 1.3 | 1.1 | 1.0 | 1.0 |
| 200-300 | 6.5 | 2.9 | 1.1 | 1.0 | 1.0 | 1.0 |
| 300-400 | 4.9 | 2.6 | 1.1 | 1.0 | 1.0 | 1.0 |
| 400-500 | 3.9 | 2.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >500 | 2.1 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 21.9 | 11.2 | 2.3 | 1.2 | *1.0* | *1.0* |
| 10-50 | 11.7 | 5.8 | 1.5 | 1.1 | *1.0* | *1.0* |
| 50-100 | 6.9 | 3.7 | 1.2 | 1.0 | *1.0* | *1.0* |
| 100-200 | 4.0 | 2.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 200-300 | 2.5 | 1.6 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 2.2 | 1.4 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 1.9 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | *>100* | *90.7* | *18.1* | *9.1* | *4.5* | *1.8* |
| 10-50 | *>100* | *70.6* | *15.1* | *7.7* | *3.9* | *1.7* |
| 50-100 | *99.3* | *52.9* | *11.5* | *5.9* | *3.2* | *1.6* |
| 100-200 | 68.7 | 36.0 | 7.9 | 4.3 | *2.6* | *1.5* |
| 200-300 | 51.9 | 27.4 | 5.5 | 3.6 | *2.5* | *1.5* |
| 300-400 | 42.2 | 22.2 | 5.3 | 3.3 | *2.5* | *1.5* |
| 400-500 | 35.6 | 18.7 | 4.6 | 3.2 | *2.5* | *1.5* |
| >500 | 20.2 | 10.7 | 3.7 | 3.1 | *2.5* | *1.5* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 16.4 | 8.3 | 2.0 | 1.3 | *1.1* | *1.0* |
| 10-50 | 3.9 | 2.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 2.2 | 1.4 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.3 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *>100* | *49.7* | *26.3* | *13.6* | *5.6* |
| **10-50** | *>100* | *83.7* | *20.4* | *10.6* | *5.2* | *2.4* |
| **50-100** | 95.0 | *51.9* | *11.7* | *5.8* | *3.1* | *1.5* |
| **100-200** | 54.0 | 29.1 | 6.2 | 3.3 | 1.8 | *1.2* |
| **200-300** | 38.4 | 20.2 | 3.0 | 2.3 | 1.4 | *1.2* |
| **300-400** | 29.8 | 15.5 | 3.3 | 1.8 | 1.3 | *1.2* |
| **400-500** | 24.3 | 12.6 | 2.7 | 1.6 | 1.2 | *1.2* |
| **>500** | 12.7 | 6.5 | 1.6 | 1.3 | 1.2 | *1.2* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *71.9* | *34.8* | *7.8* | *4.1* | *2.2* | *1.1* |
| **10-50** | 23.6 | 12.4 | 2.8 | 1.7 | 1.2 | *1.0* |
| **50-100** | 13.3 | 6.9 | 1.7 | 1.2 | 1.0 | *1.0* |
| **100-200** | 7.1 | 3.6 | 1.2 | 1.0 | 1.0 | *1.0* |
| **200-300** | 4.9 | 2.6 | 1.1 | 1.0 | 1.0 | *1.0* |
| **300-400** | 3.7 | 2.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 2.7 | 1.7 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.7 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **10-50** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **50-100** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **100-200** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **200-300** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **300-400** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **400-500** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **>500** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *42.2* | *22.1* | *4.7* | *2.5* | *1.5* | *1.0* |
| **10-50** | *14.5* | *7.3* | *1.8* | *1.2* | *1.0* | *1.0* |
| **50-100** | 7.8 | 4.1 | 1.3 | *1.0* | *1.0* | *1.0* |
| **100-200** | 4.2 | 2.2 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 2.9 | 1.7 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 2.3 | 1.4 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.8 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

### *B1.4 Klei*

**a) 30 m<X<100 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 60.8 | 32.1 | 6.2 | 3.6 | 2.0 | *1.2* |
| **10-50** | 17.9 | 8.0 | 2.1 | 1.4 | 1.1 | 1.0 |
| **50-100** | 8.7 | 4.8 | 1.4 | 1.1 | 1.0 | 1.0 |
| **100-200** | 4.9 | 2.6 | 1.1 | 1.0 | 1.0 | 1.0 |
| **200-300** | 3.4 | 1.9 | 1.0 | 1.0 | 1.0 | 1.0 |
| **300-400** | 2.6 | 1.5 | 1.0 | 1.0 | 1.0 | 1.0 |
| **400-500** | 2.2 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 15.7 | 7.8 | 1.9 | 1.1 | *1.0* | *1.0* |
| **10-50** | 5.3 | 2.8 | 1.1 | 1.0 | *1.0* | *1.0* |
| **50-100** | 3.0 | 1.7 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.7 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.4 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *76.3* | *16.2* | *8.2* | *4.1* | *1.7* |
| **10-50** | 68.8 | 36.7 | 8.0 | 4.2 | 2.3 | *1.3* |
| **50-100** | 42.5 | 22.4 | 4.1 | 2.6 | 1.6 | *1.1* |
| **100-200** | 24.3 | 12.6 | 2.8 | 1.6 | 1.2 | *1.0* |
| **200-300** | 17.0 | 8.8 | 2.0 | 1.3 | 1.1 | *1.0* |
| **300-400** | 13.1 | 6.7 | 1.6 | 1.2 | 1.0 | *1.0* |
| **400-500** | 10.7 | 4.9 | 1.4 | 1.1 | 1.0 | *1.0* |
| **>500** | 5.2 | 2.9 | 1.1 | 1.0 | 1.0 | *1.0* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 5.2 | 2.8 | 1.2 | 1.0 | *1.0* | *1.0* |
| **10-50** | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **50-100** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *89.5* | *21.0* | *10.8* | *5.6* | *2.5* |
| **10-50** | 47.5 | 25.0 | 5.3 | 2.8 | 1.7 | *1.1* |
| **50-100** | 25.5 | 13.1 | 2.9 | 1.7 | 1.2 | *1.0* |
| **100-200** | 13.2 | 5.7 | 1.7 | 1.2 | 1.0 | *1.0* |
| **200-300** | 9.0 | 4.6 | 1.3 | 1.1 | 1.0 | *1.0* |
| **300-400** | 6.1 | 3.4 | 1.2 | 1.0 | 1.0 | *1.0* |
| **400-500** | 5.4 | 2.9 | 1.1 | 1.0 | 1.0 | *1.0* |
| **>500** | 2.8 | 1.6 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | 31.9 | 16.4 | 3.5 | 2.0 | *1.3* | *1.0* |
| **10-50** | 7.9 | 4.0 | 1.3 | 1.1 | 1.0 | *1.0* |
| **50-100** | 4.1 | 2.3 | 1.1 | 1.0 | 1.0 | *1.0* |
| **100-200** | 2.2 | 1.4 | 1.0 | 1.0 | 1.0 | *1.0* |
| **200-300** | 1.6 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 44.9 | 22.8 | 11.5 | 4.7 |
| **10-50** | >100 | >100 | 27.8 | 14.3 | 6.6 | 3.1 |
| **50-100** | >100 | 82.4 | 18.1 | 8.4 | 4.7 | 2.3 |
| **100-200** | 93.7 | 49.7 | 9.8 | 5.4 | 3.1 | 2.1 |
| **200-300** | 68.1 | 35.5 | 7.5 | 4.0 | 2.6 | 2.1 |
| **300-400** | 53.2 | 27.6 | 5.8 | 3.4 | 2.5 | 2.1 |
| **400-500** | 43.8 | 22.6 | 4.9 | 3.0 | 2.5 | 2.1 |
| **>500** | 23.3 | 11.9 | 3.1 | 2.7 | 2.5 | 2.1 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *25.5* | *13.1* | *2.9* | *1.7* | *1.2* | *1.0* |
| **10-50** | 6.8 | 3.6 | 1.2 | *1.0* | *1.0* | *1.0* |
| **50-100** | 3.6 | 2.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 2.0 | 1.3 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.3 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

**b) 100 m<X<200 m**

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | *>100* | *51.4* | *11.3* | *5.8* | *3.0* | *1.3* |
| 10-50 | 40.8 | 21.4 | 4.6 | 2.5 | 1.5 | *1.1* |
| 50-100 | 23.7 | 12.2 | 2.7 | 1.6 | 1.2 | 1.0 |
| 100-200 | 12.9 | 6.4 | 1.6 | 1.2 | 1.0 | 1.0 |
| 200-300 | 8.9 | 4.6 | 1.3 | 1.0 | 1.0 | 1.0 |
| 300-400 | 6.8 | 3.5 | 1.1 | 1.0 | 1.0 | 1.0 |
| 400-500 | 4.8 | 2.8 | 1.1 | 1.0 | 1.0 | 1.0 |
| >500 | 2.8 | 1.6 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 21.7 | 11.1 | 2.3 | 1.2 | *1.0* | *1.0* |
| 10-50 | 11.5 | 5.6 | 1.5 | 1.1 | *1.0* | *1.0* |
| 50-100 | 6.6 | 3.6 | 1.2 | 1.0 | *1.0* | *1.0* |
| 100-200 | 3.9 | 2.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 200-300 | 2.8 | 1.6 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 2.2 | 1.4 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 1.8 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | *>100* | *86.2* | *18.0* | *9.0* | *4.5* | *1.8* |
| 10-50 | *>100* | *64.6* | *13.9* | *7.1* | *3.7* | *1.6* |
| 50-100 | 87.3 | 46.4 | *10.0* | *5.0* | *2.7* | *1.4* |
| 100-200 | 56.4 | 29.6 | 6.1 | 3.3 | 1.8 | *1.2* |
| 200-300 | 41.6 | 21.6 | 4.6 | 2.4 | 1.5 | *1.2* |
| 300-400 | 32.9 | 17.0 | 3.6 | 2.0 | 1.4 | *1.2* |
| 400-500 | 27.3 | 14.0 | 2.9 | 1.7 | 1.4 | *1.2* |
| >500 | 14.6 | 7.5 | 1.7 | 1.4 | 1.4 | *1.2* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 13.0 | 6.6 | 1.7 | 1.2 | *1.0* | *1.0* |
| 10-50 | 3.1 | 1.8 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.8 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *>100* | *40.1* | *20.9* | *10.8* | *4.3* |
| **10-50** | *>100* | *59.0* | *13.2* | *6.3* | *3.6* | *1.7* |
| **50-100** | 62.6 | 33.4 | 6.8 | 3.7 | 2.1 | *1.2* |
| **100-200** | 34.4 | 17.9 | 3.8 | 2.1 | 1.3 | *1.0* |
| **200-300** | 23.8 | 12.2 | 2.7 | 1.5 | 1.1 | *1.0* |
| **300-400** | 18.2 | 9.3 | 2.1 | 1.3 | 1.0 | *1.0* |
| **400-500** | 14.7 | 7.5 | 1.7 | 1.2 | 1.0 | *1.0* |
| **>500** | 7.5 | 3.9 | 1.2 | 1.0 | 1.0 | *1.0* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *62.0* | *32.6* | *6.8* | *3.6* | *2.0* | *1.1* |
| **10-50** | 18.8 | 9.9 | 2.3 | 1.5 | 1.1 | *1.0* |
| **50-100** | 10.4 | 5.4 | 1.5 | 1.1 | 1.0 | *1.0* |
| **100-200** | 5.6 | 2.8 | 1.1 | 1.0 | 1.0 | *1.0* |
| **200-300** | 3.8 | 2.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **300-400** | 2.9 | 1.7 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 2.1 | 1.4 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **10-50** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **50-100** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **100-200** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **200-300** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **300-400** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **400-500** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **>500** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *45.3* | *23.6* | *4.9* | *2.7* | *1.5* | *1.0* |
| **10-50** | *16.5* | *7.9* | *2.0* | *1.3* | *1.1* | *1.0* |
| **50-100** | 8.7 | 4.7 | *1.3* | *1.1* | *1.0* | *1.0* |
| **100-200** | 4.8 | 2.5 | 1.1 | *1.0* | *1.0* | *1.0* |
| **200-300** | 3.3 | 1.9 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 2.5 | 1.5 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.9 | 1.3 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.3 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

### c) X>200 m

| As | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | *>100* | *62.1* | *12.9* | *6.6* | *3.3* | *1.4* |
| 10-50 | 58.3 | 31.1 | 6.8 | 3.6 | 2.0 | *1.1* |
| 50-100 | 36.2 | 19.1 | 3.6 | 2.3 | 1.4 | *1.0* |
| 100-200 | 20.8 | 10.8 | 2.4 | 1.4 | 1.1 | 1.0 |
| 200-300 | 14.6 | 7.5 | 1.8 | 1.2 | 1.0 | 1.0 |
| 300-400 | 11.2 | 5.8 | 1.5 | 1.1 | 1.0 | 1.0 |
| 400-500 | 9.1 | 4.2 | 1.3 | 1.0 | 1.0 | 1.0 |
| >500 | 4.5 | 2.5 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 23.2 | 11.7 | 2.4 | 1.2 | *1.0* | *1.0* |
| 10-50 | 15.7 | 8.1 | 1.9 | 1.1 | *1.0* | *1.0* |
| 50-100 | 10.5 | 5.2 | 1.4 | 1.1 | *1.0* | *1.0* |
| 100-200 | 6.0 | 3.2 | 1.1 | 1.0 | *1.0* | *1.0* |
| 200-300 | 4.4 | 2.4 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 3.5 | 1.9 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 2.8 | 1.6 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | *>100* | *90.7* | *18.2* | *9.1* | *4.5* | *1.8* |
| 10-50 | *>100* | *87.6* | *17.8* | *8.9* | *4.5* | *1.8* |
| 50-100 | *>100* | *85.1* | *17.3* | *8.8* | *4.4* | *1.8* |
| 100-200 | *>100* | *80.6* | *16.8* | *8.6* | *4.4* | *1.8* |
| 200-300 | *>100* | *76.8* | *16.4* | *8.6* | *4.4* | *1.8* |
| 300-400 | *>100* | *73.7* | *16.2* | *8.5* | *4.4* | *1.8* |
| 400-500 | *>100* | *71.0* | *16.1* | *8.5* | *4.4* | *1.8* |
| >500 | *>100* | *62.0* | *16.0* | *8.5* | *4.4* | *1.8* |

| Cu | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <50 | 50-100 | 100-500 | 500-1000 | 1000-2000 | >2000 |
| <10 | 20.1 | 10.5 | 2.4 | 1.5 | *1.1* | *1.0* |
| 10-50 | 4.8 | 2.7 | 1.1 | 1.0 | *1.0* | *1.0* |
| 50-100 | 2.7 | 1.6 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **300-400** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **400-500** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **Hg** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *>100* | *>100* | *50.2* | *26.4* | *13.6* | *5.6* |
| **10-50** | *>100* | *85.6* | *20.5* | *10.6* | *5.0* | *2.4* |
| **50-100** | 92.1 | *52.2* | *11.7* | *5.6* | *3.1* | *1.6* |
| **100-200** | 54.9 | 29.3 | 6.0 | 3.2 | 1.8 | *1.4* |
| **200-300** | 38.9 | 20.3 | 4.3 | 2.3 | 1.5 | *1.4* |
| **300-400** | 29.9 | 15.6 | 3.3 | 1.8 | 1.4 | *1.4* |
| **400-500** | 24.4 | 12.6 | 2.7 | 1.6 | 1.4 | *1.4* |
| **>500** | 12.7 | 6.5 | 1.6 | 1.4 | 1.4 | *1.4* |

| **Ni** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *74.7* | *40.1* | *8.8* | *4.6* | *2.4* | *1.1* |
| **10-50** | 30.2 | 15.9 | 3.5 | 2.0 | *1.3* | *1.0* |
| **50-100** | 17.3 | 8.9 | 2.1 | 1.3 | 1.1 | *1.0* |
| **100-200** | 9.3 | 4.3 | 1.3 | 1.1 | 1.0 | *1.0* |
| **200-300** | 6.4 | 3.3 | 1.1 | 1.0 | 1.0 | *1.0* |
| **300-400** | 4.5 | 2.5 | 1.0 | 1.0 | 1.0 | *1.0* |
| **400-500** | 2.6 | 2.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>500** | 2.1 | 1.3 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **10-50** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **50-100** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **100-200** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **200-300** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **300-400** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **400-500** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |
| **>500** | >100 | >100 | 48.0 | 24.0 | 12.0 | 4.8 |

| Zn | $K_{d,vul}$ (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<10** | *52.4* | *27.6* | *5.9* | *3.1* | *1.6* | *1.0* |
| **10-50** | *24.4* | *12.8* | *2.9* | *1.7* | *1.2* | *1.0* |
| **50-100** | *14.4* | *7.5* | *1.8* | *1.2* | *1.0* | *1.0* |
| **100-200** | 8.0 | 3.8 | 1.2 | *1.0* | *1.0* | *1.0* |
| **200-300** | 5.5 | 2.9 | 1.1 | *1.0* | *1.0* | *1.0* |
| **300-400** | 4.0 | 2.2 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 2.5 | 1.9 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.9 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* |

## B2 Monocyclische aromatische KWS en overige organische stoffen

### a) 30 m<X<100 m

| benzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 3.0 | 2.8 | 2.2 | 1.8 | 1.6 | 1.5 |
| 10-50 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 | 1.5 |
| 50-100 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 100-200 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 200-300 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 300-400 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 400-500 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| >500 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |

| ethylbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.0 | 5.1 | 4.1 | 3.7 | 3.5 | *3.4* |
| 10-50 | 3.6 | 3.5 | 3.4 | 3.4 | 3.4 | *3.4* |
| 50-100 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | *3.4* |
| 100-200 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | *3.4* |
| 200-300 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | *3.4* |
| 300-400 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | *3.4* |
| 400-500 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | *3.4* |
| >500 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | *3.4* |

| tolueen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 10-50 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 50-100 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 100-200 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 200-300 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 300-400 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 400-500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| >500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

| xyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 4.2 | 3.6 | 2.8 | 2.4 | 2.3 | *2.2* |
| 10-50 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | *2.2* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **50-100** | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | *2.2* |
| **100-200** | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | *2.2* |
| **200-300** | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | *2.2* |
| **300-400** | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | *2.2* |
| **400-500** | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | *2.2* |
| **>500** | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | *2.2* |

| **styreen** | | | **%OC,vul** | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 7.4 | 5.5 | 4.2 | 3.8 | 3.8 | *3.8* |
| **10-50** | 3.9 | 3.8 | 3.8 | 3.8 | 3.8 | *3.8* |
| **50-100** | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | *3.8* |
| **100-200** | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | *3.8* |
| **200-300** | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | *3.8* |
| **300-400** | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | *3.8* |
| **400-500** | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | *3.8* |
| **>500** | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | *3.8* |

| **hexaan** | | | **%OC,vul** | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.4 | 1.7 | 1.2 | *1.0* | *1.0* | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

| **heptaan** | | | **%OC,vul** | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | *2.7* | *1.7* | *1.2* | *1.0* | *1.0* | *1.0* |
| **10-50** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| octaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | 1.7 | 1.1 | 1.0 | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 200-300 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| MTBE | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 5.0 | 5.0 | 4.2 | 3.9 | 3.5 | 2.8 |
| 10-50 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 |
| 50-100 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 100-200 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 200-300 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 300-400 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 400-500 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| >500 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |

## b) 100 m<X<200 m

| benzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 15.8 | 14.0 | 10.3 | 7.6 | 5.6 | 4.1 |
| 10-50 | 5.4 | 5.0 | 4.3 | 4.0 | 3.8 | 3.8 |
| 50-100 | 4.2 | 4.0 | 3.8 | 3.8 | 3.8 | 3.8 |
| 100-200 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| 200-300 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| 300-400 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| 400-500 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| >500 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |

| ethylbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *>100* | *>100* | *82.4* | *61.5* | *49.9* | *44.9* |
| 10-50 | 57.5 | *51.3* | *46.1* | *44.9* | *44.7* | *44.7* |
| 50-100 | 47.0 | 45.5 | *44.8* | *44.7* | *44.7* | *44.7* |
| 100-200 | 44.8 | 44.7 | *44.7* | *44.7* | *44.7* | *44.7* |
| 200-300 | 44.7 | 44.7 | *44.7* | *44.7* | *44.7* | *44.7* |
| 300-400 | 44.7 | 44.7 | *44.7* | *44.7* | *44.7* | *44.7* |
| 400-500 | 44.7 | 44.7 | *44.7* | *44.7* | *44.7* | *44.7* |
| >500 | 44.7 | 44.7 | *44.7* | *44.7* | *44.7* | *44.7* |

| tolueen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 10-50 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 50-100 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 100-200 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 200-300 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 300-400 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 400-500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| >500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

| xyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *51.4* | *38.1* | *25.4* | *18.4* | *14.5* | *12.7* |
| 10-50 | 17.2 | 15.1 | 13.1 | *12.6* | *12.5* | *12.5* |
| 50-100 | 13.5 | 12.9 | 12.6 | *12.5* | *12.5* | *12.5* |
| 100-200 | 12.6 | 12.5 | 12.5 | *12.5* | *12.5* | *12.5* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | 12.5 | 12.5 | 12.5 | *12.5* | *12.5* | *12.5* |
| **300-400** | 12.5 | 12.5 | 12.5 | *12.5* | *12.5* | *12.5* |
| **400-500** | 12.5 | 12.5 | 12.5 | *12.5* | *12.5* | *12.5* |
| **>500** | 12.5 | 12.5 | 12.5 | *12.5* | *12.5* | *12.5* |

| **styreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | *>100* | *>100* | *92.4* | *69.6* | *61.3* | *59.3* |
| **10-50** | 78.2 | 65.3 | *59.8* | *59.3* | *59.3* | *59.3* |
| **50-100** | 62.5 | 59.8 | *59.3* | *59.3* | *59.3* | *59.3* |
| **100-200** | 59.4 | 59.3 | *59.3* | *59.3* | *59.3* | *59.3* |
| **200-300** | 59.3 | 59.3 | *59.3* | *59.3* | *59.3* | *59.3* |
| **300-400** | 59.3 | 59.3 | *59.3* | *59.3* | *59.3* | *59.3* |
| **400-500** | 59.3 | 59.3 | *59.3* | *59.3* | *59.3* | *59.3* |
| **>500** | 59.3 | 59.3 | *59.3* | *59.3* | *59.3* | *59.3* |

| **hexaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 6.5 | *4.0* | *2.0* | *1.4* | *1.1* | *1.0* |
| **10-50** | 1.7 | 1.3 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

| **heptaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | *6.2* | *3.7* | *1.8* | *1.3* | *1.1* | *1.0* |
| **10-50** | 1.7 | *1.2* | *1.0* | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| octaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.0 | 3.6 | 1.8 | 1.2 | *1.1* | *1.0* |
| 10-50 | 1.7 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 200-300 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| MTBE | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 55.1 | 55.1 | 42.2 | 39.6 | 35.5 | 26.0 |
| 10-50 | 17.0 | 16.8 | 16.2 | 15.6 | 14.8 | 13.4 |
| 50-100 | 13.4 | 13.4 | 13.3 | 13.1 | 12.9 | 12.6 |
| 100-200 | 12.6 | 12.6 | 12.6 | 12.6 | 12.5 | 12.5 |
| 200-300 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| 300-400 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| 400-500 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| >500 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |

## c) X>200 m

| benzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 90.3 | 80.0 | 56.6 | 40.5 | *27.4* | *16.8* |
| 10-50 | 26.6 | 23.5 | 19.2 | 15.9 | 14.1 | *13.5* |
| 50-100 | 18.0 | 16.5 | 14.6 | 13.8 | 13.5 | *13.5* |
| 100-200 | 14.2 | 13.8 | 13.5 | 13.5 | 13.5 | *13.5* |
| 200-300 | 13.6 | 13.5 | 13.5 | 13.5 | 13.5 | *13.5* |
| 300-400 | 13.5 | 13.5 | 13.5 | 13.5 | 13.5 | *13.5* |
| 400-500 | 13.5 | 13.5 | 13.5 | 13.5 | 13.5 | *13.5* |
| >500 | 13.5 | 13.5 | 13.5 | 13.5 | 13.5 | *13.5* |

| ethylbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 10-50 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 50-100 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 100-200 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 200-300 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 300-400 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 400-500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| >500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

| tolueen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 10-50 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 50-100 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 100-200 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 200-300 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 300-400 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 400-500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| >500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

| xyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 10-50 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 50-100 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 100-200 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **200-300** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **300-400** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **400-500** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **>500** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

| **styreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **10-50** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **50-100** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **100-200** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **200-300** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **300-400** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **400-500** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **>500** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

| **hexaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | *11.2* | *6.6* | *3.1* | *1.9* | *1.3* | *1.0* |
| **10-50** | 2.5 | 1.7 | 1.1 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.5 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

| **heptaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | *11.2* | *6.0* | *2.7* | *1.6* | *1.2* | *1.0* |
| **10-50** | *2.5* | *1.6* | *1.1* | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.5 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **200-300** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **300-400** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **400-500** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>500** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| octaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.2 | 5.9 | 2.6 | *1.6* | *1.2* | *1.0* |
| 10-50 | 2.5 | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 200-300 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 300-400 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 400-500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >500 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| MTBE | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 10-50 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 50-100 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 100-200 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 200-300 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 300-400 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| 400-500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| >500 | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

## B3 PAK's

### a) 30 m<X<100 m

| acenafteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | 1.7 | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| acenaftyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *2.7* | *1.7* | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *2.7* | *1.6* | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *2.7* | *1.6* | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *2.7* | *1.6* | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **50-100** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>200** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| **benzo(b)fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.7 | 1.6 | 1.1 | 1.0 | *1.0* | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **benzo(ghi)peryleen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.7 | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **benzo(k)fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.7 | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **chryseen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.7 | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| dibenz(a,h)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | *1.6* | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| fenantreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | 1.7 | 1.1 | 1.0 | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| fluoranteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| fluoreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | 1.7 | 1.1 | 1.0 | 1.0 | 1.0 |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| indeno(123-cd)pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | 1.6 | 1.1 | 1.0 | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| naftaleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.3 | 4.4 | 3.3 | 3.0 | *3.0* | *3.0* |
| 10-50 | 3.2 | 3.0 | 3.0 | 3.0 | *3.0* | *3.0* |
| 50-100 | 3.0 | 3.0 | 3.0 | 3.0 | *3.0* | *3.0* |
| 100-200 | 3.0 | 3.0 | 3.0 | 3.0 | *3.0* | *3.0* |
| >200 | 3.0 | 3.0 | 3.0 | 3.0 | *3.0* | *3.0* |

| pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

**b) 100 m<X<200 m**

| acenafteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.8* | *3.6* | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | 1.7 | 1.2 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| acenaftyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.8* | *3.6* | *1.8* | *1.3* | *1.1* | *1.0* |
| 10-50 | 1.7 | *1.2* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.8* | *3.5* | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | 1.7 | *1.2* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.8* | *3.5* | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | *1.7* | *1.2* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.7* | *3.5* | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | 1.7 | 1.2 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **>200** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| **benzo(b)fluoranteen** | | | | %OC,vul | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 6.8 | 3.4 | 1.7 | *1.2* | *1.1* | *1.0* |
| **10-50** | 1.7 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **benzo(ghi)peryleen** | | | | %OC,vul | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 6.8 | 3.5 | 1.7 | 1.2 | 1.1 | 1.0 |
| **10-50** | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **benzo(k)fluoranteen** | | | | %OC,vul | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 6.8 | 3.5 | 1.7 | 1.2 | 1.1 | *1.0* |
| **10-50** | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **chryseen** | | | | %OC,vul | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 6.8 | 3.5 | 1.7 | 1.2 | 1.1 | 1.0 |
| **10-50** | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| dibenz(a,h)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.7* | *3.5* | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | 1.7 | 1.2 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| fenantreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.8 | 3.6 | 1.7 | 1.2 | *1.1* | *1.0* |
| 10-50 | 1.7 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| fluoranteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.8 | 3.6 | 1.7 | 1.2 | 1.1 | *1.0* |
| 10-50 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* |
| 50-100 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| fluoreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.7 | 3.5 | 1.7 | 1.2 | 1.1 | 1.0 |
| 10-50 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| indeno(123-cd)pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.8 | 3.5 | 1.7 | 1.2 | *1.1* | *1.0* |
| 10-50 | 1.7 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| naftaleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *>100* | *83.5* | *45.7* | *34.7* | *31.0* | *30.2* |
| 10-50 | 41.2 | *33.3* | *30.4* | *30.2* | *30.2* | *30.2* |
| 50-100 | 32.2 | *30.5* | *30.2* | *30.2* | *30.2* | *30.2* |
| 100-200 | 30.3 | *30.2* | *30.2* | *30.2* | *30.2* | *30.2* |
| >200 | 30.2 | *30.2* | *30.2* | *30.2* | *30.2* | *30.2* |

| pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.7 | 3.5 | 1.7 | 1.2 | 1.1 | *1.0* |
| 10-50 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* |
| 50-100 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

### c) X>200 m

| acenafteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.4* | *5.3* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | 2.5 | 1.5 | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| acenaftyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.4* | *6.0* | *2.7* | *1.6* | *1.2* | *1.0* |
| 10-50 | *2.5* | *1.6* | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.2* | *5.7* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | *2.5* | *1.5* | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.2* | *5.8* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | *2.5* | *1.5* | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | *1.5* | *1.1* | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.4* | *5.9* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | *2.5* | *1.5* | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **>200** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| **benzo(b)fluoranteen** | | | | %OC,vul | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | *11.4* | 5.2 | *2.6* | *1.6* | *1.2* | *1.0* |
| **10-50** | 2.5 | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-200** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **benzo(ghi)peryleen** | | | | %OC,vul | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 11.3 | 5.7 | 2.6 | 1.6 | 1.2 | 1.0 |
| **10-50** | 2.5 | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **benzo(k)fluoranteen** | | | | %OC,vul | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 11.3 | 5.6 | 2.6 | 1.6 | 1.2 | *1.0* |
| **10-50** | 2.5 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **chryseen** | | | | %OC,vul | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 11.4 | 5.3 | 2.6 | 1.6 | 1.2 | 1.0 |
| **10-50** | 2.5 | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| dibenz(a,h)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.4* | *5.9* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | 2.5 | *1.5* | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| fenantreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.3 | 5.8 | 2.6 | *1.6* | *1.2* | *1.0* |
| 10-50 | 2.5 | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| fluoranteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.4 | 5.4 | 2.6 | 1.6 | 1.2 | *1.0* |
| 10-50 | 2.5 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* |
| 50-100 | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| fluoreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.5 | 5.9 | 2.6 | 1.6 | 1.2 | 1.0 |
| 10-50 | 2.5 | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| indeno(123-cd)pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.2 | 5.7 | 2.6 | 1.6 | *1.2* | *1.0* |
| 10-50 | 2.5 | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| naftaleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<10** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **10-50** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **50-100** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **100-200** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |
| **>200** | *>100* | *>100* | *>100* | *>100* | *>100* | *>100* |

| pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<10** | 11.5 | 5.9 | 2.6 | 1.6 | 1.2 | *1.0* |
| **10-50** | 2.5 | 1.5 | 1.1 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-200** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

## B4 Gechloreerde solventen

### a) 30 m<X<100 m

| 1,1,1-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.2 | 1.8 | 1.4 | 1.2 | 1.1 | 1.0 |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1,2-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.1 | 1.9 | 1.6 | 1.3 | 1.1 | 1.0 |
| 10-50 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.0 | 1.9 | 1.7 | 1.5 | 1.2 | 1.0 |
| 10-50 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.2 | 1.7 | 1.2 | 1.1 | 1.0 | 1.0 |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.4 | 1.9 | 1.7 | 1.5 | 1.3 | 1.1 |
| 10-50 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **1,3-dichloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.4 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **1,4-dichloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.3 | 1.7 | 1.2 | 1.1 | 1.0 | 1.0 |
| **10-50** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **cis-1,2-dichlooretheen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.0 | 1.9 | 1.7 | 1.4 | 1.2 | 1.0 |
| **10-50** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **dichloormethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 2.4 | 1.9 | 1.8 | 1.6 | 1.4 | 1.1 |
| **10-50** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| hexachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *2.7* | *1.7* | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| monochloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.1 | 1.8 | 1.3 | 1.1 | 1.0 | 1.0 |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| pentachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.7 | 1.6 | 1.1 | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

| tetrachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *2.7* | *1.7* | *1.1* | *1.0* | *1.0* | *1.0* |
| 10-50 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| tetrachlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.1 | 1.7 | 1.3 | 1.1 | 1.0 | 1.0 |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| tetrachloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.1 | 1.8 | 1.4 | 1.1 | 1.0 | 1.0 |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trans-1,2-dichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.0 | 1.9 | 1.7 | 1.4 | 1.2 | 1.0 |
| 10-50 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.5 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.2 | 1.9 | 1.5 | 1.3 | 1.1 | 1.0 |
| 10-50 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *2.1* | *2.0* | *1.5* | *1.3* | *1.1* | *1.0* |
| 10-50 | 1.1 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| vinylchloride | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.4 | 2.4 | 1.9 | 1.7 | 1.5 | 1.2 |
| 10-50 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

**b) 100 m<X<200 m**

| 1,1,1-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 5.0 | 4.1 | 2.9 | 2.1 | 1.5 | 1.1 |
| 10-50 | 1.6 | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1,2-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 4.8 | 4.4 | 3.3 | 2.5 | 1.8 | 1.2 |
| 10-50 | 1.6 | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 4.8 | 4.4 | 3.8 | 2.9 | 2.2 | 1.4 |
| 10-50 | 1.6 | 1.5 | 1.3 | 1.2 | 1.1 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 5.7 | 4.1 | 2.2 | 1.5 | 1.1 | 1.0 |
| 10-50 | 1.7 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 5.9 | 4.5 | 4.0 | 3.2 | 2.5 | 1.5 |
| 10-50 | 1.6 | 1.5 | 1.4 | 1.2 | 1.1 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **1,3-dichloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 6.4 | 3.9 | 2.0 | 1.4 | 1.1 | 1.0 |
| **10-50** | 1.7 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **1,4-dichloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 5.6 | 3.8 | 2.2 | 1.5 | 1.1 | 1.0 |
| **10-50** | 1.7 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **cis-1,2-dichlooretheen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 4.8 | 4.4 | 3.5 | 2.7 | 2.0 | 1.3 |
| **10-50** | 1.6 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 |
| **50-100** | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **dichloormethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **L (m)** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<10** | 5.9 | 4.5 | 4.0 | 3.3 | 2.5 | 1.6 |
| **10-50** | 1.6 | 1.5 | 1.4 | 1.3 | 1.1 | 1.0 |
| **50-100** | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| hexachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.8* | *3.6* | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | 1.7 | *1.2* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| monochloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 5.2 | 4.0 | 2.6 | 1.8 | 1.3 | 1.0 |
| 10-50 | 1.6 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| pentachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.7 | 3.5 | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | 1.7 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

| tetrachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *6.8* | *3.6* | *1.7* | *1.2* | *1.1* | *1.0* |
| 10-50 | 1.7 | *1.2* | *1.0* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.2 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| tetrachlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 5.2 | 4.0 | 2.4 | 1.6 | 1.2 | 1.0 |
| 10-50 | 1.6 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| tetrachloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 5.2 | 4.0 | 2.6 | 1.8 | 1.3 | 1.0 |
| 10-50 | 1.6 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trans-1,2-dichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 4.8 | 4.4 | 3.4 | 2.7 | 2.0 | 1.2 |
| 10-50 | 1.6 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.8 | 3.8 | 1.9 | 1.3 | 1.1 | 1.0 |
| 10-50 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 4.9 | 4.3 | 3.1 | 2.2 | 1.6 | 1.1 |
| 10-50 | 1.6 | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *4.9* | *4.4* | *3.2* | *2.4* | *1.7* | *1.2* |
| 10-50 | *1.6* | *1.4* | *1.2* | *1.1* | *1.0* | *1.0* |
| 50-100 | 1.2 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| vinylchloride | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<10** | 5.7 | 5.7 | 4.2 | 3.8 | 3.2 | 2.1 |
| **10-50** | 1.6 | 1.5 | 1.5 | 1.4 | 1.2 | 1.1 |
| **50-100** | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 |
| **100-200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>200** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

**c) X>200 m**

| 1,1,1-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 8.4 | 7.0 | 5.8 | 3.6 | 2.3 | 1.3 |
| 10-50 | 2.5 | 2.1 | 1.5 | 1.2 | 1.1 | 1.0 |
| 50-100 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1,2-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 8.2 | 7.4 | 5.5 | 4.0 | 2.7 | 1.5 |
| 10-50 | 2.5 | 2.2 | 1.7 | 1.4 | 1.1 | 1.0 |
| 50-100 | 1.5 | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 8.0 | 7.5 | 6.4 | 4.9 | 3.5 | 1.9 |
| 10-50 | 2.3 | 2.2 | 1.8 | 1.6 | 1.3 | 1.0 |
| 50-100 | 1.5 | 1.4 | 1.3 | 1.1 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.4 | 6.6 | 3.5 | 2.1 | 1.4 | 1.0 |
| 10-50 | 2.5 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *10.2* | 7.5 | 6.6 | 5.3 | 4.0 | *2.2* |
| 10-50 | 2.3 | 2.2 | 1.9 | 1.6 | 1.4 | 1.1 |
| 50-100 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,3-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.2 | 6.5 | 3.1 | 1.8 | 1.3 | 1.0 |
| 10-50 | 2.5 | 1.7 | 1.1 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,4-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.4 | 6.7 | 3.5 | 2.1 | 1.4 | 1.0 |
| 10-50 | 2.5 | 1.8 | 1.2 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| cis-1,2-dichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 8.1 | 7.4 | 5.8 | 4.4 | 3.1 | 1.7 |
| 10-50 | 2.3 | 2.1 | 1.8 | 1.5 | 1.2 | 1.0 |
| 50-100 | 1.5 | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| dichloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 10.1 | 7.6 | 6.7 | 5.4 | 4.2 | 2.3 |
| 10-50 | 2.3 | 2.2 | 1.9 | 1.7 | 1.4 | 1.1 |
| 50-100 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| hexachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.3* | *5.6* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | *2.5* | *1.5* | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | *1.1* | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| monochloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.2 | 8.4 | 4.8 | 2.9 | 1.8 | 1.1 |
| 10-50 | 2.5 | 2.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| pentachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.4* | *5.9* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | 2.5 | 1.5 | 1.1 | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

| tetrachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *11.3* | *5.6* | *2.6* | *1.6* | *1.2* | *1.0* |
| 10-50 | *2.5* | *1.5* | *1.1* | *1.0* | *1.0* | *1.0* |
| 50-100 | 1.5 | *1.1* | *1.0* | *1.0* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| tetrachlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.3 | 7.8 | 4.2 | 2.5 | 1.6 | 1.1 |
| 10-50 | 2.5 | 1.9 | 1.3 | 1.1 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| tetrachloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.2 | 8.4 | 4.9 | 3.0 | 1.9 | 1.1 |
| 10-50 | 2.5 | 2.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trans-1,2-dichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 8.1 | 7.4 | 5.7 | 4.4 | 3.0 | 1.7 |
| 10-50 | 2.3 | 2.1 | 1.8 | 1.4 | 1.2 | 1.0 |
| 50-100 | 1.5 | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.4 | 6.0 | 2.9 | 1.7 | 1.2 | 1.0 |
| 10-50 | 2.5 | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 8.4 | 7.4 | 5.0 | 4.0 | 2.5 | 1.3 |
| 10-50 | 2.5 | 2.1 | 1.6 | 1.3 | 1.1 | 1.0 |
| 50-100 | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | *8.2* | *7.4* | *5.4* | *3.9* | *2.8* | *1.4* |
| 10-50 | *2.5* | *2.2* | *1.7* | *1.3* | *1.1* | *1.0* |
| 50-100 | *1.5* | *1.4* | *1.2* | *1.1* | *1.0* | *1.0* |
| 100-200 | 1.1 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| >200 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| vinylchloride | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 9.7 | 9.7 | 7.1 | 6.4 | 5.2 | 3.2 |
| 10-50 | 2.3 | 2.2 | 2.1 | 1.9 | 1.6 | 1.2 |
| 50-100 | 1.4 | 1.4 | 1.4 | 1.3 | 1.2 | 1.0 |
| 100-200 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

## B5 Cyanides

### a) 30 m<X<100 m

| cyanide | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 2.3 | 1.7 | 1.2 | 1.1 | 1.0 | 1.0 |
| 10-50 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

### b) 100 m<X<200 m

| cyanide | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 6.7 | 4.1 | 2.1 | 1.4 | 1.1 | 1.0 |
| 10-50 | 1.7 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

### c) X>200 m

| cyanide | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| L (m) | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| <10 | 11.3 | 6.8 | 3.2 | 1.9 | 1.3 | 1.0 |
| 10-50 | 2.5 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 |
| 50-100 | 1.5 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| 100-200 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| >200 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

# BIJLAGE C: ATTENUATIEFACTOR VOOR TRANSPORT DOOR ONDERLIGGENDE ONVERZADIGDE BODEM MET MKN UIT VLAREBO

Volgende tabellen geven $AF_{bodem}$ voor de verschillende Vlarebo-parameters voor verschillende diktes van de opvulling, $K_d$ van de onderliggende bodem (1 m dikte) en $K_d$ van het vulmateriaal. Als milieukwaliteitsnorm in grondwater is de bodemsaneringsnorm voor grondwater (hetzelfde niveau als de drinkwaternorm) gebruikt (VLAREBO bijlage IV). Binnen de tabellen zijn domeinen afgebakend (cursief gedrukte grijze gebieden) die de scenario's aflijnen waar concentraties lager dan BSN type III geen aanleiding geven tot overschrijding van de bodemsaneringsnorm voor grondwater aan de receptor en waar de berekening dus niet uitgevoerd hoeft te worden.

## C1 Zware metalen en metalloïden

### a) $d_{vul}$ < 10 m

| As | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **500-1000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1000-2000** | 2.6 | 1.6 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>2000** | 6.8 | 3.0 | 1.1 | 1.0 | 1.0 | 1.0 |

| Cd | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-500** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **500-1000** | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1000-2000** | 2.6 | 1.6 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>2000** | 6.9 | 3.0 | 1.1 | 1.0 | *1.0* | *1.0* |

| Cr | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| | | | | | | |
|---|---|---|---|---|---|---|
| **100-500** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 2.6 | 1.6 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 6.8 | 3.0 | 1.1 | 1.0 | 1.0 | *1.0* |

| **Cu** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-500** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **500-1000** | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1000-2000** | 2.6 | 1.6 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>2000** | 6.9 | 3.0 | 1.1 | 1.0 | *1.0* | *1.0* |

| **Hg** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-500** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 2.7 | 1.6 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 7.0 | 3.0 | 1.1 | 1.0 | 1.0 | *1.0* |

| **Ni** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-500** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 2.6 | 1.6 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 6.9 | 3.0 | 1.1 | 1.0 | 1.0 | *1.0* |

| **Pb** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **500-1000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1000-2000** | 2.6 | 1.6 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>2000** | 6.9 | 3.0 | 1.1 | 1.0 | 1.0 | 1.0 |

| Zn | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-500** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **500-1000** | 1.6 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1000-2000** | 2.6 | 1.6 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>2000** | 6.9 | 3.0 | 1.1 | *1.0* | *1.0* | *1.0* |

**b) 10 m<$d_{vul}$<20 m**

| As | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **500-1000** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1000-2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>2000** | 3.2 | 1.9 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **500-1000** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1000-2000** | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>2000** | 3.2 | 1.9 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 3.2 | 1.9 | 1.0 | 1.0 | 1.0 | *1.0* |

| Cu | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **500-1000** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1000-2000** | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>2000** | 3.2 | 1.9 | 1.0 | 1.0 | *1.0* | *1.0* |

| Hg | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 3.2 | 1.9 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Ni** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 3.2 | 1.9 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **500-1000** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1000-2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>2000** | 3.2 | 1.9 | 1.0 | 1.0 | 1.0 | 1.0 |

| **Zn** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **500-1000** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1000-2000** | 1.6 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>2000** | 3.2 | 1.9 | 1.0 | *1.0* | *1.0* | *1.0* |

### c) $d_{vul}$>20 m

| As | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **500-1000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1000-2000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| Cd | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **500-1000** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1000-2000** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>2000** | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |

| Cr | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |

| Cu | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **500-1000** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1000-2000** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>2000** | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |

| Hg | Kd,vul (l/kg) | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Ni** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **500-1000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1000-2000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |

| **Pb** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **500-1000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1000-2000** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>2000** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| **Zn** | **Kd,vul (l/kg)** | | | | | |
|---|---|---|---|---|---|---|
| **Kd,bodem (l/kg)** | **<50** | **50-100** | **100-500** | **500-1000** | **1000-2000** | **>2000** |
| **<50** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **50-100** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **100-500** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **500-1000** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1000-2000** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>2000** | 1.6 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |

## C2 Monocyclische aromatische KWS en overige organische stoffen

### a) $d_{vul}$ < 10 m

| benzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.4 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.5 | 1.8 | 1.3 | 1.1 | 1.0 | 1.0 |

| ethylbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.6 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.4 | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 |

| tolueen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.0 | 2.0 | 1.3 | 1.1 | 1.0 | 1.0 |

| xyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.3 | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 |

| styreen | %OC,vul |
|---|---|

| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.7 | 2.1 | 1.2 | 1.0 | 1.0 | 1.0 |

| **hexaan** | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.6 | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 2.2 | 1.6 | 1.2 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 3.3 | 2.2 | 1.4 | *1.2* | *1.0* | *1.0* |
| **2.0-6.0** | 5.3 | 3.2 | 1.8 | *1.3* | *1.1* | *1.0* |
| **>6.0** | *13.9* | *7.0* | *3.1* | *1.9* | *1.3* | *1.1* |

| **heptaan** | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.5 | *1.3* | *1.1* | *1.1* | *1.0* | *1.0* |
| **0.2-0.5** | 1.7 | *1.4* | *1.2* | *1.1* | *1.1* | *1.0* |
| **0.5-1.0** | *2.4* | *1.6* | *1.2* | *1.1* | *1.1* | *1.0* |
| **1.0-2.0** | *3.6* | *2.1* | *1.3* | *1.1* | *1.1* | *1.0* |
| **2.0-6.0** | *6.0* | *3.0* | *1.6* | *1.2* | *1.1* | *1.0* |
| **>6.0** | *>100* | *>100* | *>100* | *>100* | *59.9* | *20.0* |

| **octaan** | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.3 | 1.2 | 1.1 | 1.1 | *1.1* | *1.0* |
| **0.2-0.5** | 1.4 | 1.2 | 1.1 | 1.1 | *1.0* | *1.0* |
| **0.5-1.0** | 1.9 | 1.4 | 1.1 | 1.1 | *1.0* | *1.0* |
| **1.0-2.0** | 2.6 | 1.6 | 1.2 | 1.1 | *30.0* | *10.0* |
| **2.0-6.0** | *>100* | *>100* | *>100* | *>100* | *60.0* | *20.0* |
| **>6.0** | *>100* | *>100* | *>100* | *>100* | *>100* | *60.0* |

| **MTBE** | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

**b) 10 m<$d_{vul}$<20 m**

| benzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |

| ethylbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.7 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |

| tolueen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |

| xyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.3 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| styreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.0 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| **hexaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.2 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.4 | 1.2 | 1.1 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.7 | 1.4 | 1.1 | *1.1* | *1.0* | *1.0* |
| **2.0-6.0** | 2.3 | 1.7 | 1.3 | *1.1* | *1.0* | *1.0* |
| **>6.0** | 4.7 | 2.8 | 1.6 | *1.3* | *1.1* | *1.0* |

| **heptaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.1 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.2 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.4 | 1.2 | *1.1* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.7 | *1.3* | *1.1* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 2.3 | *1.6* | *1.2* | *1.1* | *1.0* | *1.0* |
| **>6.0** | *>100* | *>100* | *>100* | *>100* | *59.9* | *20.0* |

| **octaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.3 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.5 | 1.2 | 1.1 | 1.0 | *1.0* | *10.0* |
| **2.0-6.0** | *>100* | *>100* | *>100* | *>100* | *60.0* | *20.0* |
| **>6.0** | *>100* | *>100* | *>100* | *>100* | *>100* | *60.0* |

| **MTBE** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

**c) $d_{vul}$>20 m**

| benzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| ethylbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| tolueen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| xyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| styreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **hexaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.2 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.3 | 1.1 | 1.1 | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.7 | 1.4 | 1.1 | *1.1* | *1.0* | *1.0* |

| **heptaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.2 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.3 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *>100* | *>100* | *>100* | *>100* | *59.9* | *20.0* |

| **octaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | *>100* | *>100* | *>100* | *>100* | *60.0* | *20.0* |
| **>6.0** | *>100* | *>100* | *>100* | *>100* | *>100* | *60.0* |

| **MTBE** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

## C3 PAK's

### a) $d_{vul}$ < 10 m

| acenafteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 4.3 | *2.2* | *1.2* | *1.0* | *1.0* | *1.0* |

| acenaftyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *3.4* | *2.1* | *1.2* | *1.0* | *1.0* | *1.0* |

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *3.7* | *2.2* | *1.2* | *1.0* | *1.0* | *1.0* |

| benzo(a)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | *1.6* | *1.1* | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *4.3* | *2.2* | *1.2* | *1.0* | *1.0* | *1.0* |

| benzo(a)pyreen | %OC,vul |
|---|---|

| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *2.7* | *2.2* | *1.2* | *1.1* | *1.1* | *1.1* |

| benzo(b)fluoranteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>6.0** | 4.2 | 2.2 | 1.2 | 1.0 | *1.0* | *1.0* |

| benzo(ghi)peryleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.9 | 2.0 | 1.2 | 1.0 | 1.0 | 1.0 |

| benzo(k)fluoranteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 4.1 | 2.2 | 1.2 | 1.0 | 1.0 | *1.0* |

| chryseen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2.0-6.0** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 4.3 | 2.2 | 1.2 | 1.0 | 1.0 | 1.0 |

| **dibenz(ah)antraceen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 2.7 | *2.2* | *1.2* | *1.1* | *1.1* | *1.1* |

| **fenantreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>6.0** | 4.3 | 2.3 | 1.2 | 1.0 | *1.0* | *1.0* |

| **fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 4.3 | 2.3 | 1.2 | 1.0 | 1.0 | *1.0* |

| **fluoreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.6 | 2.2 | 1.2 | 1.0 | 1.0 | 1.0 |

| **indeno(123-cd)pyreen** | **%OC,vul** |
|---|---|

| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.1 | 1.1 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 3.7 | 3.6 | 3.4 | *3.0* | *2.5* | *1.5* |
| **>6.0** | *>100* | *>100* | *66.0* | *33.0* | *16.5* | *5.5* |

| naftaleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 3.1 | 2.1 | 1.2 | 1.0 | 1.0 | *1.0* |

| pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 4.3 | 2.3 | 1.2 | 1.0 | 1.0 | *1.0* |

**b) 10 m<$d_{vul}$<20 m**

| acenafteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 2.2 | 1.3 | *1.0* | *1.0* | *1.0* | *1.0* |

| acenaftyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 2.1 | *1.3* | *1.0* | *1.0* | *1.0* | *1.0* |

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 2.2 | *1.3* | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *2.3* | *1.3* | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 2.2 | *1.3* | *1.1* | *1.1* | *1.1* | *1.1* |

| **benzo(b)fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>6.0** | 2.2 | 1.3 | 1.0 | 1.0 | *1.0* | *1.0* |

| **benzo(ghi)peryleen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.1 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| **benzo(k)fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 2.2 | 1.3 | 1.0 | 1.0 | 1.0 | *1.0* |

| **chryseen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **>6.0** | 2.2 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| **dibenz(ah)antraceen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 2.2 | 1.3 | *1.1* | *1.1* | *1.1* | *1.1* |

| **fenantreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>6.0** | 2.2 | 1.3 | 1.0 | 1.0 | *1.0* | *1.0* |

| **fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 2.2 | 1.3 | 1.0 | 1.0 | 1.0 | *1.0* |

| **fluoreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.2 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| **indeno(123-cd)pyreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.1 | 1.1 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 3.7 | 3.6 | 3.4 | *3.0* | *2.5* | *1.5* |
| **>6.0** | *>100* | *>100* | *66.0* | *33.0* | *16.5* | *5.5* |

| **naftaleen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 2.0 | 1.3 | 1.0 | 1.0 | 1.0 | *1.0* |

| **pyreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 2.2 | 1.3 | 1.0 | 1.0 | 1.0 | *1.0* |

**c) $d_{vul}$>20 m**

| acenafteen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| acenaftyleen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)antraceen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* |

| benzo(a)pyreen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.1 | *1.1* | *1.1* | *1.1* | *1.1* |

| **benzo(b)fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **benzo(ghi)peryleen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **benzo(k)fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **chryseen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **dibenz(ah)antraceen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.1 | *1.1* | *1.1* | *1.1* | *1.1* |

| **fenantreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |

| **fluoranteen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **fluoreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **indeno(123-cd)pyreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.1 | 1.1 | 1.0 | *1.0* | *1.0* |
| **2.0-6.0** | 3.7 | 3.6 | 3.4 | *3.0* | *2.5* | *1.5* |
| **>6.0** | *>100* | *>100* | *66.0* | *33.0* | *16.5* | *5.5* |

| **naftaleen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

| **pyreen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | *1.0* |

## C4 Gechloreerde solventen

### a) $d_{vul}$ < 10 m

| 1,1,1-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.6 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.9 | 2.0 | 1.3 | 1.1 | 1.0 | 1.0 |

| 1,1,2-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.7 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 |

| 1,1-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.6 | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 |

| 1,2-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.6 | 2.1 | 1.2 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorethaan | %OC,vul |
|---|---|

| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |

| 1,3-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.9 | 2.2 | 1.2 | 1.0 | 1.0 | 1.0 |

| 1,4-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.6 | 2.1 | 1.2 | 1.0 | 1.0 | 1.0 |

| cis-1,2-dichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.7 | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 |

| dichloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.3 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 |

| **hexachloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | *1.1* | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *3.6* | *2.1* | *1.2* | *1.0* | *1.0* | *1.0* |

| **monochloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.9 | 1.4 | 1.2 | 1.0 | 1.0 | 1.0 |

| **pentachloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>6.0** | 4.2 | 2.3 | 1.2 | *1.0* | *1.0* | *1.0* |

| **tetrachloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.6 | *1.1* | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *4.2* | *2.2* | *1.2* | *1.0* | *1.0* | *1.0* |

| **tetrachlooretheen** | **%OC,vul** |
|---|---|

| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
|---|---|---|---|---|---|---|
| **<0.2** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.6 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.4 | 2.2 | 1.2 | 1.1 | 1.0 | 1.0 |

| tetrachloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.8 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.3 | 2.4 | 1.3 | 1.1 | 1.0 | 1.0 |

| trans-1,2-dichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.4 | 1.3 | 1.1 | 1.1 | 1.0 | 1.0 |
| **>6.0** | 2.0 | 1.7 | 1.3 | 1.1 | 1.0 | 1.0 |

| trichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.4 | 2.0 | 1.2 | 1.0 | 1.0 | 1.0 |

| trichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2.0-6.0** | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.4 | 1.8 | 1.2 | 1.1 | 1.0 | 1.0 |

| **trichloormethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.1 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.1 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.2 | 1.1 | 1.1 | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.3 | 1.2 | *1.1* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 2.1 | 1.7 | *1.2* | *1.1* | *1.0* | *1.0* |

| **vinylchloride** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.4 | 1.4 | 1.3 | 1.3 | 1.2 | 1.0 |
| **0.2-0.5** | 1.5 | 1.5 | 1.4 | 1.4 | 1.2 | 1.0 |
| **0.5-1.0** | 1.5 | 1.5 | 1.5 | 1.4 | 1.3 | 1.0 |
| **1.0-2.0** | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.0 |
| **2.0-6.0** | 2.0 | 1.9 | 1.8 | 1.7 | 1.5 | 1.2 |
| **>6.0** | 3.1 | 3.0 | 2.7 | 2.3 | 1.9 | 1.4 |

### b) 10 m<$d_{vul}$<20 m

| **1,1,1-trichloorethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |

| **1,1,2-trichloorethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.9 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,3-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.0 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,4-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.8 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| **cis-1,2-dichlooretheen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |

| **dichloormethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| **hexachloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *2.2* | *1.3* | *1.0* | *1.0* | *1.0* | *1.0* |

| **monochloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.6 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |

| pentachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>6.0** | 2.2 | 1.3 | 1.0 | *1.0* | *1.0* | *1.0* |

| tetrachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | *2.2* | *1.3* | *1.0* | *1.0* | *1.0* | *1.0* |

| tetrachlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.8 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| tetrachloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.7 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 |

| trans-1,2-dichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |

| **trichloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.9 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 |

| **trichlooretheen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |

| **trichloormethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.1 | 1.1 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.3 | 1.2 | *1.1* | *1.0* | *1.0* | *1.0* |

| **vinylchloride** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 |
| **0.2-0.5** | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 |
| **0.5-1.0** | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 |
| **1.0-2.0** | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.0 |
| **2.0-6.0** | 1.3 | 1.3 | 1.3 | 1.2 | 1.2 | 1.1 |
| **>6.0** | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.1 |

**c) $d_{vul}$>20 m**

| 1,1,1-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1,2-trichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,1-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| 1,2-dichloorethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **1,3-dichloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **1,4-dichloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **cis-1,2-dichlooretheen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **dichloormethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **hexachloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| **monochloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **pentachloorbenzeen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

| tetrachloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.2 | 1.0 | *1.0* | *1.0* | *1.0* | *1.0* |

| tetrachlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| tetrachloormethaan | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |

| trans-1,2-dichlooretheen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichloorbenzeen | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **trichlooretheen** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **trichloormethaan** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **1.0-2.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **2.0-6.0** | 1.0 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |
| **>6.0** | 1.1 | 1.0 | 1.0 | *1.0* | *1.0* | *1.0* |

| **vinylchloride** | **%OC,vul** | | | | | |
|---|---|---|---|---|---|---|
| **%OC,bodem** | **<0.2** | **0.2-0.5** | **0.5-1.0** | **1.0-2.0** | **2.0-6.0** | **>6.0** |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 |

## C5 Cyanides

### a) $d_{vul}$ < 10 m

| vrije cyanide | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.3 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 2.0 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 2.8 | 1.7 | 1.2 | 1.1 | 1.0 | 1.0 |
| **2.0-6.0** | 4.3 | 2.2 | 1.3 | 1.1 | 1.0 | 1.0 |
| **>6.0** | 11.3 | 4.6 | 1.8 | 1.3 | 1.1 | 1.0 |

### b) 10 m<$d_{vul}$<20 m

| vrije cyanide | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.9 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.8 | 2.0 | 1.2 | 1.1 | 1.0 | 1.0 |

### c) $d_{vul}$>20 m

| vrije cyanide | %OC,vul | | | | | |
|---|---|---|---|---|---|---|
| %OC,bodem | <0.2 | 0.2-0.5 | 0.5-1.0 | 1.0-2.0 | 2.0-6.0 | >6.0 |
| **<0.2** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.2-0.5** | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-2.0** | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| **2.0-6.0** | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.5 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 |

# BIJLAGE D: ATTENUATIEFACTOR VOOR TRANSPORT IN GRONDWATER MET MKN UIT VLAREM II

Volgende tabellen geven $AF_{grondwater}$ voor de verschillende parameters opgenomen in bijlage 2.4.1 van VLAREM II voor een afstand tot de receptor van X = 30 m voor verschillende afmetingen van de groeve, types van aquifer en $K_d$ van het vulmateriaal. De milieukwaliteitsnormen in grondwater zijn de grondwaterkwaliteitsnormen en drempelwaarden opgenomen in VLAREM II (bijlage 2.4.1). Binnen de tabellen zijn domeinen afgebakend (grijze cursief gedrukte gebieden) die de scenario's aflijnen waarbij concentraties in de aangevoerde bodemmaterialen, lager dan BSN type III, geen aanleiding geven tot overschrijding van de grondwaterkwaliteitsnorm/drempelwaarde uit VLAREM II ter hoogte van de receptor en waar een verdere berekening dus niet nodig is.

## D1 Metalen

### *D1.1 Grind*

| As grind | L ≤ 10 m Kd,vul | | | | L > 10 m Kd,vul | | | |
|---|---|---|---|---|---|---|---|---|
| GWL | <50 | 50-100 | 100-500 | >500 | <50 | 50-100 | 100-500 | >500 |
| BLKS_0160_GWL_1m | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0160_GWL_1s | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_1m | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_1s | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_2m | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_2s | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1000_GWL_1s | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1000_GWL_2s | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_1m | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_1s | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_2m | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_2s | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0200_GWL_1 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CKS_0220_GWL_1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0160_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0400_GWL_1 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0600_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0600_GWL_2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0800_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0800_GWL_2 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0800_GWL_3 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0120_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0120_GWL_2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1000_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1000_GWL_2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_3 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_5 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| **Cd grind** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | | | | | | | | |
| BLKS_0160_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_1m | | | | | | | | |
| BLKS_0400_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | | | | | | | | |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLKS_1000_GWL_1s | | | | | | | | |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | | | | | | | | |
| BLKS_1100_GWL_1s | | | | | | | | |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | | | | |
| CVS_0160_GWL_1 | | | | | | | | |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | | | | | | | | |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | | | | | | | | |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | | | | | | | | |
| KPS_0120_GWL_1 | | | | | | | | |
| KPS_0120_GWL_2 | | | | | | | | |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

| **Ni grind** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLKS_0160_GWL_1s | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_1m | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_1s | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_2m | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_2s | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_2 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_3 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1000_GWL_1s | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1000_GWL_2s | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_1m | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_1s | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_2m | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_2s | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0200_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0160_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0400_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0600_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0600_GWL_2 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0800_GWL_1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0800_GWL_2 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0800_GWL_3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0120_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0120_GWL_2 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0160_GWL_1 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0160_GWL_2 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0160_GWL_3 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0100_GWL_1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1000_GWL_1 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1000_GWL_2 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_2 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_3 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_4 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_5 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| Pb grind | L ≤ 10 m Kd,vul | | | | L > 10 m Kd,vul | | | |
|---|---|---|---|---|---|---|---|---|
| GWL | <50 | 50-100 | 100-500 | >500 | <50 | 50-100 | 100-500 | >500 |
| BLKS_0160_GWL_1m | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0160_GWL_1s | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_1m | 1.8 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_1s | 1.8 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | 1.8 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | 1.8 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_1s | 1.8 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | | | | | | | | |
| CKS_0220_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 1.8 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0160_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0120_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0120_GWL_2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0160_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0160_GWL_2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| KPS_0160_GWL_3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0100_GWL_1 | 1.8 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 1.8 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MS_0200_GWL_2 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

| **Zn grind** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | | | | | | | | |
| BLKS_0160_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_1m | | | | | | | | |
| BLKS_0400_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | | | | | | | | |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | | | | | | | | |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | | | | | | | | |
| BLKS_1100_GWL_1s | | | | | | | | |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | | | | |
| CVS_0160_GWL_1 | | | | | | | | |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | | | | | | | | |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | | | | | | | | |
| CVS_0800_GWL_2 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CVS_0800_GWL_3 | | | | | | | | |
| KPS_0120_GWL_1 | | | | | | | | |
| KPS_0120_GWL_2 | | | | | | | | |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

### *D1.2 Zand*

| As zand | L ≤ 10 m Kd,vul | | | | L > 10 m Kd,vul | | | |
|---|---|---|---|---|---|---|---|---|
| GWL | <50 | 50-100 | 100-500 | >500 | <50 | 50-100 | 100-500 | >500 |
| BLKS_0160_GWL_1m | 7.7 | 4.1 | 1.4 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| BLKS_0160_GWL_1s | 7.7 | 4.1 | 1.4 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| BLKS_0400_GWL_1m | 12.4 | 6.1 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| BLKS_0400_GWL_1s | 12.4 | 6.1 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| BLKS_0400_GWL_2m | 6.9 | 3.7 | 1.4 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |
| BLKS_0400_GWL_2s | 6.9 | 3.7 | 1.4 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |
| BLKS_0600_GWL_1 | 12.7 | 6.3 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| BLKS_0600_GWL_2 | 4.3 | 2.5 | 1.2 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_3 | 4.3 | 2.5 | 1.2 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 |
| BLKS_1000_GWL_1s | 14.3 | 7.0 | 1.9 | 1.1 | 1.8 | 1.3 | 1.0 | 1.0 |
| BLKS_1000_GWL_2s | 7.7 | 4.1 | 1.4 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| BLKS_1100_GWL_1m | 15.0 | 7.3 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |
| BLKS_1100_GWL_1s | 15.0 | 7.3 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |
| BLKS_1100_GWL_2m | 12.7 | 6.3 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| BLKS_1100_GWL_2s | 12.7 | 6.3 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| CKS_0200_GWL_1 | 6.8 | 3.7 | 1.4 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 9.2 | 4.7 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 8.2 | 4.3 | 1.5 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | 10.4 | 5.3 | 1.6 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| CVS_0160_GWL_1 | 10.1 | 5.1 | 1.6 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| CVS_0400_GWL_1 | 6.9 | 3.7 | 1.4 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |
| CVS_0600_GWL_1 | 12.7 | 6.3 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| CVS_0600_GWL_2 | 4.3 | 2.5 | 1.2 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 |
| CVS_0800_GWL_1 | 12.7 | 6.3 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| CVS_0800_GWL_2 | 12.7 | 6.3 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| CVS_0800_GWL_3 | 12.7 | 6.3 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| KPS_0120_GWL_1 | 9.2 | 4.7 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| KPS_0120_GWL_2 | 9.2 | 4.7 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 6.8 | 3.7 | 1.4 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MS_0200_GWL_1 | 9.2 | 4.7 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 6.8 | 3.7 | 1.4 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |
| SS_1000_GWL_1 | 9.2 | 4.7 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| SS_1000_GWL_2 | 9.2 | 4.7 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| SS_1300_GWL_1 | 15.9 | 7.6 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |
| SS_1300_GWL_2 | 7.9 | 4.2 | 1.5 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| SS_1300_GWL_3 | 11.3 | 5.7 | 1.7 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| SS_1300_GWL_4 | 4.1 | 2.4 | 1.2 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 |
| SS_1300_GWL_5 | 11.3 | 5.7 | 1.7 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |

| **Cd zand** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | | | | | | | | |
| BLKS_0160_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_1m | | | | | | | | |
| BLKS_0400_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | | | | | | | | |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | | | | | | | | |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | | | | | | | | |
| BLKS_1100_GWL_1s | | | | | | | | |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 7.6 | 4.4 | 1.4 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 8.5 | 4.9 | 1.5 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 8.5 | 4.9 | 1.5 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 9.3 | 5.3 | 1.5 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | | | | |
| CVS_0160_GWL_1 | | | | | | | | |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | | | | | | | | |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | | | | | | | | |
| KPS_0120_GWL_1 | | | | | | | | |
| KPS_0120_GWL_2 | | | | | | | | |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 8.5 | 4.9 | 1.5 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 9.0 | 5.2 | 1.5 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 8.5 | 4.8 | 1.5 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

| **Ni zand** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | 18.3 | 8.6 | 2.3 | 1.2 | 2.2 | 1.4 | 1.0 | 1.0 |
| BLKS_0160_GWL_1s | 18.3 | 8.6 | 2.3 | 1.2 | 2.2 | 1.4 | 1.0 | 1.0 |
| BLKS_0400_GWL_1m | 17.2 | 8.1 | 2.2 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| BLKS_0400_GWL_1s | 17.2 | 8.1 | 2.2 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| BLKS_0400_GWL_2m | 18.7 | 8.8 | 2.3 | 1.2 | 2.3 | 1.4 | 1.0 | 1.0 |
| BLKS_0400_GWL_2s | 18.7 | 8.8 | 2.3 | 1.2 | 2.3 | 1.4 | 1.0 | 1.0 |
| BLKS_0600_GWL_1 | 18.7 | 8.8 | 2.3 | 1.2 | 2.3 | 1.4 | 1.0 | 1.0 |
| BLKS_0600_GWL_2 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| BLKS_0600_GWL_3 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| BLKS_1000_GWL_1s | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| BLKS_1000_GWL_2s | 17.0 | 8.1 | 2.2 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| BLKS_1100_GWL_1m | 17.2 | 8.1 | 2.2 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| BLKS_1100_GWL_1s | 17.2 | 8.1 | 2.2 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| BLKS_1100_GWL_2m | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| BLKS_1100_GWL_2s | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| CKS_0200_GWL_1 | 12.6 | 6.2 | 1.9 | 1.1 | 1.8 | 1.3 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 14.6 | 7.1 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CKS_0220_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 17.6 | 8.3 | 2.2 | 1.2 | 2.2 | 1.4 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | 10.2 | 5.2 | 1.7 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| CVS_0160_GWL_1 | 16.2 | 7.7 | 2.1 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| CVS_0400_GWL_1 | 18.7 | 8.8 | 2.3 | 1.2 | 2.3 | 1.4 | 1.0 | 1.0 |
| CVS_0600_GWL_1 | 1.0 | 5.6 | 1.7 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| CVS_0600_GWL_2 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| CVS_0800_GWL_1 | 6.2 | 3.4 | 1.3 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |
| CVS_0800_GWL_2 | 16.2 | 7.7 | 2.1 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| CVS_0800_GWL_3 | 1.0 | 5.6 | 1.7 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| KPS_0120_GWL_1 | 17.0 | 8.1 | 2.2 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| KPS_0120_GWL_2 | 17.0 | 8.1 | 2.2 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| KPS_0160_GWL_1 | 8.8 | 4.6 | 1.5 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| KPS_0160_GWL_2 | 8.8 | 4.6 | 1.5 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| KPS_0160_GWL_3 | 8.8 | 4.6 | 1.5 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| MS_0100_GWL_1 | 5.4 | 3.0 | 1.3 | 1.0 | 1.2 | 1.1 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 1.3 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 11.4 | 5.7 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| SS_1000_GWL_1 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| SS_1000_GWL_2 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| SS_1300_GWL_1 | 16.6 | 7.9 | 2.2 | 1.1 | 2.1 | 1.4 | 1.0 | 1.0 |
| SS_1300_GWL_2 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| SS_1300_GWL_3 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| SS_1300_GWL_4 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| SS_1300_GWL_5 | 19.4 | 9.0 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |

| **Pb zand** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| BLKS_0160_GWL_1s | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| BLKS_0400_GWL_1m | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| BLKS_0400_GWL_1s | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLKS_1000_GWL_1s | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| BLKS_1100_GWL_1s | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| CKS_0200_GWL_2 | | | | | | | | |
| CKS_0220_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| CKS_0250_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| CVS_0100_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| CVS_0160_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| KPS_0120_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| KPS_0120_GWL_2 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| KPS_0160_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| KPS_0160_GWL_2 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| KPS_0160_GWL_3 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| MS_0100_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| MS_0200_GWL_1 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| MS_0200_GWL_2 | >100 | >100 | 35 | 3.8 | 58 | 33 | 7.3 | 1.2 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

| **Zn**<br>**zand**<br><br>**GWL** | **L ≤ 10 m**<br>**Kd,vul**<br>**<50** | **50-100** | **100-500** | **>500** | **L > 10 m**<br>**Kd,vul**<br>**<50** | **50-100** | **100-500** | **>500** |
|---|---|---|---|---|---|---|---|---|
| BLKS_0160_GWL_1m | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLKS_0160_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_1m | | | | | | | | |
| BLKS_0400_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | | | | | | | | |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | | | | | | | | |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | | | | | | | | |
| BLKS_1100_GWL_1s | | | | | | | | |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 4.8 | 2.8 | 1.2 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 5.3 | 3.1 | 1.2 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 5.1 | 3.0 | 1.2 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 6.3 | 3.6 | 1.3 | 1.0 | 1.2 | 1.1 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | | | | |
| CVS_0160_GWL_1 | | | | | | | | |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | | | | | | | | |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | | | | | | | | |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | | | | | | | | |
| KPS_0120_GWL_1 | | | | | | | | |
| KPS_0120_GWL_2 | | | | | | | | |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 6.0 | 3.4 | 1.3 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 5.1 | 3.0 | 1.2 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 6.5 | 3.7 | 1.3 | 1.0 | 1.2 | 1.1 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

### *D1.3 Leem*

| As leem | L ≤ 10 m Kd,vul | | | | L > 10 m Kd,vul | | | |
|---|---|---|---|---|---|---|---|---|
| GWL | <50 | 50-100 | 100-500 | >500 | <50 | 50-100 | 100-500 | >500 |
| BLKS_0160_GWL_1m | 17.0 | 9.1 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| BLKS_0160_GWL_1s | 17.0 | 9.1 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| BLKS_0400_GWL_1m | 27.8 | 14.7 | 3.4 | 1.4 | 3.3 | 1.9 | 1.0 | 1.0 |
| BLKS_0400_GWL_1s | 27.8 | 14.7 | 3.4 | 1.4 | 3.3 | 1.9 | 1.0 | 1.0 |
| BLKS_0400_GWL_2m | 15.2 | 8.2 | 2.2 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |
| BLKS_0400_GWL_2s | 15.2 | 8.2 | 2.2 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |
| BLKS_0600_GWL_1 | 28.7 | 15.1 | 3.4 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| BLKS_0600_GWL_2 | 9.0 | 5.0 | 1.6 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| BLKS_0600_GWL_3 | 9.0 | 5.0 | 1.6 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| BLKS_1000_GWL_1s | 32.4 | 17.0 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| BLKS_1000_GWL_2s | 17.0 | 9.1 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| BLKS_1100_GWL_1m | 34.1 | 17.9 | 3.9 | 1.5 | 3.8 | 2.2 | 1.1 | 1.0 |
| BLKS_1100_GWL_1s | 34.1 | 17.9 | 3.9 | 1.5 | 3.8 | 2.2 | 1.1 | 1.0 |
| BLKS_1100_GWL_2m | 28.7 | 15.1 | 3.4 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_2s | 28.7 | 15.1 | 3.4 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| CKS_0200_GWL_1 | 14.7 | 7.9 | 2.2 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 20.3 | 10.8 | 2.7 | 1.3 | 2.6 | 1.6 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 1.8 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 18.1 | 9.7 | 2.5 | 1.2 | 2.4 | 1.6 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | 23.3 | 12.4 | 3.0 | 1.3 | 2.9 | 1.8 | 1.0 | 1.0 |
| CVS_0160_GWL_1 | 22.5 | 11.9 | 2.9 | 1.3 | 2.8 | 1.7 | 1.0 | 1.0 |
| CVS_0400_GWL_1 | 15.2 | 8.2 | 2.2 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |
| CVS_0600_GWL_1 | 28.7 | 15.1 | 3.4 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| CVS_0600_GWL_2 | 9.0 | 5.0 | 1.6 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| CVS_0800_GWL_1 | 28.7 | 15.1 | 3.4 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| CVS_0800_GWL_2 | 28.7 | 15.1 | 3.4 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| CVS_0800_GWL_3 | 28.7 | 15.1 | 3.4 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| KPS_0120_GWL_1 | 20.3 | 10.8 | 2.7 | 1.3 | 2.6 | 1.6 | 1.0 | 1.0 |
| KPS_0120_GWL_2 | 20.3 | 10.8 | 2.7 | 1.3 | 2.6 | 1.6 | 1.0 | 1.0 |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 14.7 | 7.9 | 2.2 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MS_0200_GWL_1 | 20.3 | 10.8 | 2.7 | 1.3 | 2.6 | 1.6 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 14.7 | 7.9 | 2.2 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |
| SS_1000_GWL_1 | 20.3 | 10.8 | 2.7 | 1.3 | 2.6 | 1.6 | 1.0 | 1.0 |
| SS_1000_GWL_2 | 20.3 | 10.8 | 2.7 | 1.3 | 2.6 | 1.6 | 1.0 | 1.0 |
| SS_1300_GWL_1 | 36.2 | 18.9 | 4.1 | 1.5 | 4.0 | 2.2 | 1.1 | 1.0 |
| SS_1300_GWL_2 | 17.5 | 9.4 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| SS_1300_GWL_3 | 25.5 | 13.4 | 3.2 | 1.3 | 3.1 | 1.8 | 1.0 | 1.0 |
| SS_1300_GWL_4 | 8.6 | 4.8 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| SS_1300_GWL_5 | 25.5 | 13.4 | 3.2 | 1.3 | 3.1 | 1.8 | 1.0 | 1.0 |

| **Cd**<br>**leem**<br>**GWL** | **L ≤ 10 m**<br>**Kd,vul**<br><50 | 50-100 | 100-500 | >500 | **L > 10 m**<br>**Kd,vul**<br><50 | 50-100 | 100-500 | >500 |
|---|---|---|---|---|---|---|---|---|
| BLKS_0160_GWL_1m | | | | | | | | |
| BLKS_0160_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_1m | | | | | | | | |
| BLKS_0400_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | | | | | | | | |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | | | | | | | | |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | | | | | | | | |
| BLKS_1100_GWL_1s | | | | | | | | |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 13.5 | 7.0 | 1.9 | 1.1 | 1.8 | 1.3 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 15.3 | 7.8 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 15.3 | 7.8 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 17.0 | 8.6 | 2.1 | 1.1 | 2.0 | 1.3 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | | | | |
| CVS_0160_GWL_1 | | | | | | | | |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | | | | | | | | |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | | | | | | | | |
| KPS_0120_GWL_1 | | | | | | | | |
| KPS_0120_GWL_2 | | | | | | | | |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 15.3 | 7.8 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 16.4 | 8.3 | 2.1 | 1.1 | 2.0 | 1.3 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 15.2 | 7.7 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

| **Ni**<br>**leem**<br><br>**GWL** | **L ≤ 10 m**<br>**Kd,vul**<br><50 | 50-100 | 100-500 | >500 | **L > 10 m**<br>**Kd,vul**<br><50 | 50-100 | 100-500 | >500 |
|---|---|---|---|---|---|---|---|---|
| BLKS_0160_GWL_1m | 24.2 | 11.9 | 2.9 | 1.3 | 2.8 | 1.7 | 1.0 | 1.0 |
| BLKS_0160_GWL_1s | 24.2 | 11.9 | 2.9 | 1.3 | 2.8 | 1.7 | 1.0 | 1.0 |
| BLKS_0400_GWL_1m | 22.7 | 11.3 | 2.7 | 1.2 | 2.7 | 1.6 | 1.0 | 1.0 |
| BLKS_0400_GWL_1s | 22.7 | 11.3 | 2.7 | 1.2 | 2.7 | 1.6 | 1.0 | 1.0 |
| BLKS_0400_GWL_2m | 24.8 | 12.2 | 2.9 | 1.3 | 2.8 | 1.7 | 1.0 | 1.0 |
| BLKS_0400_GWL_2s | 24.8 | 12.2 | 2.9 | 1.3 | 2.8 | 1.7 | 1.0 | 1.0 |
| BLKS_0600_GWL_1 | 24.8 | 12.2 | 2.9 | 1.3 | 2.8 | 1.7 | 1.0 | 1.0 |
| BLKS_0600_GWL_2 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| BLKS_0600_GWL_3 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| BLKS_1000_GWL_1s | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| BLKS_1000_GWL_2s | 22.4 | 11.1 | 2.7 | 1.2 | 2.6 | 1.6 | 1.0 | 1.0 |
| BLKS_1100_GWL_1m | 22.7 | 11.3 | 2.7 | 1.2 | 2.7 | 1.6 | 1.0 | 1.0 |
| BLKS_1100_GWL_1s | 22.7 | 11.3 | 2.7 | 1.2 | 2.7 | 1.6 | 1.0 | 1.0 |
| BLKS_1100_GWL_2m | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| BLKS_1100_GWL_2s | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| CKS_0200_GWL_1 | 16.6 | 8.4 | 2.2 | 1.2 | 2.2 | 1.4 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 19.3 | 9.7 | 2.5 | 1.2 | 2.4 | 1.5 | 1.0 | 1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CKS_0220_GWL_1 | 1.5 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 23.3 | 11.5 | 2.8 | 1.3 | 2.7 | 1.6 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | 13.4 | 6.9 | 2.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.0 |
| CVS_0160_GWL_1 | 21.4 | 10.7 | 2.6 | 1.2 | 2.6 | 1.6 | 1.0 | 1.0 |
| CVS_0400_GWL_1 | 24.8 | 12.2 | 2.9 | 1.3 | 2.8 | 1.7 | 1.0 | 1.0 |
| CVS_0600_GWL_1 | 14.7 | 7.5 | 2.1 | 1.2 | 2.0 | 1.4 | 1.0 | 1.0 |
| CVS_0600_GWL_2 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| CVS_0800_GWL_1 | 8.1 | 4.4 | 1.5 | 1.1 | 1.4 | 1.2 | 1.0 | 1.0 |
| CVS_0800_GWL_2 | 21.4 | 10.7 | 2.6 | 1.2 | 2.6 | 1.6 | 1.0 | 1.0 |
| CVS_0800_GWL_3 | 14.7 | 7.5 | 2.1 | 1.2 | 2.0 | 1.4 | 1.0 | 1.0 |
| KPS_0120_GWL_1 | 22.4 | 11.1 | 2.7 | 1.2 | 2.6 | 1.6 | 1.0 | 1.0 |
| KPS_0120_GWL_2 | 22.4 | 11.1 | 2.7 | 1.2 | 2.6 | 1.6 | 1.0 | 1.0 |
| KPS_0160_GWL_1 | 11.5 | 6.0 | 1.8 | 1.1 | 1.7 | 1.3 | 1.0 | 1.0 |
| KPS_0160_GWL_2 | 11.5 | 6.0 | 1.8 | 1.1 | 1.7 | 1.3 | 1.0 | 1.0 |
| KPS_0160_GWL_3 | 11.5 | 6.0 | 1.8 | 1.1 | 1.7 | 1.3 | 1.0 | 1.0 |
| MS_0100_GWL_1 | 6.9 | 3.8 | 1.4 | 1.0 | 1.4 | 1.1 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 1.5 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 14.9 | 7.7 | 2.1 | 1.2 | 2.0 | 1.4 | 1.0 | 1.0 |
| SS_1000_GWL_1 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| SS_1000_GWL_2 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| SS_1300_GWL_1 | 21.9 | 10.9 | 2.7 | 1.2 | 2.6 | 1.6 | 1.0 | 1.0 |
| SS_1300_GWL_2 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| SS_1300_GWL_3 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| SS_1300_GWL_4 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| SS_1300_GWL_5 | 25.7 | 12.6 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |

| **Pb leem** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| BLKS_0160_GWL_1s | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| BLKS_0400_GWL_1m | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| BLKS_0400_GWL_1s | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLKS_1000_GWL_1s | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| BLKS_1100_GWL_1s | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| CKS_0200_GWL_2 | | | | | | | | |
| CKS_0220_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| CKS_0250_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| CVS_0100_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| CVS_0160_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| KPS_0120_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| KPS_0120_GWL_2 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| KPS_0160_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| KPS_0160_GWL_2 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| KPS_0160_GWL_3 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| MS_0100_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| MS_0200_GWL_1 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| MS_0200_GWL_2 | >100 | >100 | 41 | 4.3 | >100 | 56 | 12 | 1.6 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

| **Zn**<br>**leem**<br><br>**GWL** | **L ≤ 10 m**<br>**Kd,vul**<br><50 | 50-100 | 100-500 | >500 | **L > 10 m**<br>**Kd,vul**<br><50 | 50-100 | 100-500 | >500 |
|---|---|---|---|---|---|---|---|---|
| BLKS_0160_GWL_1m | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLKS_0160_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_1m | | | | | | | | |
| BLKS_0400_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | | | | | | | | |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | | | | | | | | |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | | | | | | | | |
| BLKS_1100_GWL_1s | | | | | | | | |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 9.3 | 4.9 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 10.6 | 5.6 | 1.7 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 10.1 | 5.3 | 1.6 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 12.9 | 6.7 | 1.8 | 1.1 | 1.8 | 1.2 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | | | | |
| CVS_0160_GWL_1 | | | | | | | | |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | | | | | | | | |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | | | | | | | | |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | | | | | | | | |
| KPS_0120_GWL_1 | | | | | | | | |
| KPS_0120_GWL_2 | | | | | | | | |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 12.0 | 6.2 | 1.8 | 1.1 | 1.7 | 1.2 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 10.1 | 5.3 | 1.6 | 1.1 | 1.6 | 1.2 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 13.2 | 6.8 | 1.9 | 1.1 | 1.8 | 1.3 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

### *D1.4 Klei*

| As klei | L ≤ 10 m Kd,vul | | | | L > 10 m Kd,vul | | | |
|---|---|---|---|---|---|---|---|---|
| GWL | <50 | 50-100 | 100-500 | >500 | <50 | 50-100 | 100-500 | >500 |
| BLKS_0160_GWL_1m | 37.4 | 20.4 | 4.4 | 1.7 | 4.5 | 2.6 | 1.2 | 1.0 |
| BLKS_0160_GWL_1s | 37.4 | 20.4 | 4.4 | 1.7 | 4.5 | 2.6 | 1.2 | 1.0 |
| BLKS_0400_GWL_1m | 62.0 | 33.5 | 6.3 | 2.3 | 6.8 | 3.8 | 1.3 | 1.0 |
| BLKS_0400_GWL_1s | 62.0 | 33.5 | 6.3 | 2.3 | 6.8 | 3.8 | 1.3 | 1.0 |
| BLKS_0400_GWL_2m | 33.4 | 18.2 | 4.0 | 1.6 | 4.1 | 2.4 | 1.1 | 1.0 |
| BLKS_0400_GWL_2s | 33.4 | 18.2 | 4.0 | 1.6 | 4.1 | 2.4 | 1.1 | 1.0 |
| BLKS_0600_GWL_1 | 64.0 | 34.6 | 6.5 | 2.3 | 7.0 | 3.9 | 1.3 | 1.0 |
| BLKS_0600_GWL_2 | 19.4 | 10.7 | 2.7 | 1.3 | 2.7 | 1.7 | 1.1 | 1.0 |
| BLKS_0600_GWL_3 | 19.4 | 10.7 | 2.7 | 1.3 | 2.7 | 1.7 | 1.1 | 1.0 |
| BLKS_1000_GWL_1s | 72.2 | 39.0 | 7.1 | 2.5 | 7.7 | 4.3 | 1.3 | 1.0 |
| BLKS_1000_GWL_2s | 37.4 | 20.4 | 4.4 | 1.7 | 4.5 | 2.6 | 1.2 | 1.0 |
| BLKS_1100_GWL_1m | 76.3 | 41.1 | 7.4 | 2.6 | 8.1 | 4.5 | 1.4 | 1.0 |
| BLKS_1100_GWL_1s | 76.3 | 41.1 | 7.4 | 2.6 | 8.1 | 4.5 | 1.4 | 1.0 |
| BLKS_1100_GWL_2m | 64.0 | 34.6 | 6.5 | 2.3 | 7.0 | 3.9 | 1.3 | 1.0 |
| BLKS_1100_GWL_2s | 64.0 | 34.6 | 6.5 | 2.3 | 7.0 | 3.9 | 1.3 | 1.0 |
| CKS_0200_GWL_1 | 32.4 | 17.7 | 3.9 | 1.6 | 4.0 | 2.4 | 1.1 | 1.0 |
| CKS_0200_GWL_2 | 45.1 | 24.4 | 5.0 | 1.9 | 5.2 | 3.0 | 1.2 | 1.0 |
| CKS_0220_GWL_1 | 3.3 | 2.1 | 1.1 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 40.0 | 21.7 | 4.6 | 1.8 | 4.7 | 2.7 | 1.2 | 1.0 |
| CVS_0100_GWL_1 | 51.8 | 28.1 | 5.6 | 2.0 | 5.9 | 3.3 | 1.2 | 1.0 |
| CVS_0160_GWL_1 | 49.8 | 27.0 | 5.4 | 2.0 | 5.7 | 3.2 | 1.2 | 1.0 |
| CVS_0400_GWL_1 | 33.4 | 18.2 | 4.0 | 1.6 | 4.1 | 2.4 | 1.1 | 1.0 |
| CVS_0600_GWL_1 | 64.0 | 34.6 | 6.5 | 2.3 | 7.0 | 3.9 | 1.3 | 1.0 |
| CVS_0600_GWL_2 | 19.4 | 10.7 | 2.7 | 1.3 | 2.7 | 1.7 | 1.1 | 1.0 |
| CVS_0800_GWL_1 | 64.0 | 34.6 | 6.5 | 2.3 | 7.0 | 3.9 | 1.3 | 1.0 |
| CVS_0800_GWL_2 | 64.0 | 34.6 | 6.5 | 2.3 | 7.0 | 3.9 | 1.3 | 1.0 |
| CVS_0800_GWL_3 | 64.0 | 34.6 | 6.5 | 2.3 | 7.0 | 3.9 | 1.3 | 1.0 |
| KPS_0120_GWL_1 | 45.1 | 24.4 | 5.0 | 1.9 | 5.2 | 3.0 | 1.2 | 1.0 |
| KPS_0120_GWL_2 | 45.1 | 24.4 | 5.0 | 1.9 | 5.2 | 3.0 | 1.2 | 1.0 |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MS_0100_GWL_1 | 32.4 | 17.7 | 3.9 | 1.6 | 4.0 | 2.4 | 1.1 | 1.0 |
| MS_0200_GWL_1 | 45.1 | 24.4 | 5.0 | 1.9 | 5.2 | 3.0 | 1.2 | 1.0 |
| MS_0200_GWL_2 | 32.4 | 17.7 | 3.9 | 1.6 | 4.0 | 2.4 | 1.1 | 1.0 |
| SS_1000_GWL_1 | 45.1 | 24.4 | 5.0 | 1.9 | 5.2 | 3.0 | 1.2 | 1.0 |
| SS_1000_GWL_2 | 45.1 | 24.4 | 5.0 | 1.9 | 5.2 | 3.0 | 1.2 | 1.0 |
| SS_1300_GWL_1 | 81.0 | 43.7 | 7.7 | 2.7 | 8.5 | 4.7 | 1.4 | 1.0 |
| SS_1300_GWL_2 | 38.6 | 21.0 | 4.5 | 1.7 | 4.6 | 2.7 | 1.2 | 1.0 |
| SS_1300_GWL_3 | 56.6 | 30.6 | 5.9 | 2.1 | 6.3 | 3.6 | 1.3 | 1.0 |
| SS_1300_GWL_4 | 18.6 | 10.3 | 2.6 | 1.3 | 2.6 | 1.7 | 1.1 | 1.0 |
| SS_1300_GWL_5 | 56.6 | 30.6 | 5.9 | 2.1 | 6.3 | 3.6 | 1.3 | 1.0 |

| **Cd klei** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | | | | | | | | |
| BLKS_0160_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_1m | | | | | | | | |
| BLKS_0400_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | | | | | | | | |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | | | | | | | | |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | | | | | | | | |
| BLKS_1100_GWL_1s | | | | | | | | |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 22.8 | 11.6 | 2.7 | 1.2 | 2.7 | 1.6 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 25.9 | 13.1 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 25.9 | 13.1 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 28.9 | 14.5 | 3.2 | 1.3 | 3.1 | 1.8 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | | | | |
| CVS_0160_GWL_1 | | | | | | | | |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | | | | | | | | |
| CVS_0600_GWL_2 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CVS_0800_GWL_1 | | | | | | | | |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | | | | | | | | |
| KPS_0120_GWL_1 | | | | | | | | |
| KPS_0120_GWL_2 | | | | | | | | |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 25.9 | 13.1 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 27.8 | 14.0 | 3.1 | 1.3 | 3.0 | 1.8 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 25.8 | 13.0 | 3.0 | 1.3 | 2.9 | 1.7 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

| **Ni klei** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | 31.0 | 16.3 | 3.6 | 1.4 | 3.5 | 2.0 | 1.0 | 1.0 |
| BLKS_0160_GWL_1s | 31.0 | 16.3 | 3.6 | 1.4 | 3.5 | 2.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_1m | 29.2 | 15.3 | 3.5 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_1s | 29.2 | 15.3 | 3.5 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| BLKS_0400_GWL_2m | 31.8 | 16.7 | 3.7 | 1.4 | 3.6 | 2.1 | 1.1 | 1.0 |
| BLKS_0400_GWL_2s | 31.8 | 16.7 | 3.7 | 1.4 | 3.6 | 2.1 | 1.1 | 1.0 |
| BLKS_0600_GWL_1 | 31.8 | 16.7 | 3.7 | 1.4 | 3.6 | 2.1 | 1.1 | 1.0 |
| BLKS_0600_GWL_2 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| BLKS_0600_GWL_3 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| BLKS_1000_GWL_1s | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| BLKS_1000_GWL_2s | 28.8 | 15.1 | 3.4 | 1.4 | 3.3 | 2.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_1m | 29.2 | 15.3 | 3.5 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_1s | 29.2 | 15.3 | 3.5 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| BLKS_1100_GWL_2m | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| BLKS_1100_GWL_2s | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| CKS_0200_GWL_1 | 21.3 | 11.3 | 2.8 | 1.3 | 2.7 | 1.7 | 1.0 | 1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CKS_0200_GWL_2 | 24.7 | 13.0 | 3.1 | 1.3 | 3.0 | 1.8 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 29.9 | 15.7 | 3.5 | 1.4 | 3.4 | 2.0 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | 17.1 | 9.1 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| CVS_0160_GWL_1 | 27.5 | 14.4 | 3.3 | 1.4 | 3.2 | 1.9 | 1.0 | 1.0 |
| CVS_0400_GWL_1 | 31.8 | 16.7 | 3.7 | 1.4 | 3.6 | 2.1 | 1.1 | 1.0 |
| CVS_0600_GWL_1 | 18.8 | 10.0 | 2.5 | 1.2 | 2.4 | 1.6 | 1.0 | 1.0 |
| CVS_0600_GWL_2 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| CVS_0800_GWL_1 | 10.2 | 5.6 | 1.7 | 1.0 | 1.7 | 1.2 | 1.0 | 1.0 |
| CVS_0800_GWL_2 | 27.5 | 14.4 | 3.3 | 1.4 | 3.2 | 1.9 | 1.0 | 1.0 |
| CVS_0800_GWL_3 | 18.8 | 10.0 | 2.5 | 1.2 | 2.4 | 1.6 | 1.0 | 1.0 |
| KPS_0120_GWL_1 | 28.8 | 15.1 | 3.4 | 1.4 | 3.3 | 2.0 | 1.0 | 1.0 |
| KPS_0120_GWL_2 | 28.8 | 15.1 | 3.4 | 1.4 | 3.3 | 2.0 | 1.0 | 1.0 |
| KPS_0160_GWL_1 | 14.6 | 7.9 | 2.1 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |
| KPS_0160_GWL_2 | 14.6 | 7.9 | 2.1 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |
| KPS_0160_GWL_3 | 14.6 | 7.9 | 2.1 | 1.2 | 2.1 | 1.4 | 1.0 | 1.0 |
| MS_0100_GWL_1 | 8.7 | 4.8 | 1.6 | 1.1 | 1.5 | 1.2 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 1.6 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 19.1 | 10.2 | 2.6 | 1.2 | 2.5 | 1.6 | 1.0 | 1.0 |
| SS_1000_GWL_1 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| SS_1000_GWL_2 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| SS_1300_GWL_1 | 28.1 | 14.8 | 3.4 | 1.4 | 3.3 | 1.9 | 1.0 | 1.0 |
| SS_1300_GWL_2 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| SS_1300_GWL_3 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| SS_1300_GWL_4 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |
| SS_1300_GWL_5 | 33.0 | 17.3 | 3.8 | 1.4 | 3.7 | 2.1 | 1.1 | 1.0 |

| **Pb klei** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |
| BLKS_0160_GWL_1m | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| BLKS_0160_GWL_1s | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| BLKS_0400_GWL_1m | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| BLKS_0400_GWL_1s | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| BLKS_0600_GWL_2 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| BLKS_1100_GWL_1s | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| CKS_0200_GWL_2 | | | | | | | | |
| CKS_0220_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| CKS_0250_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| CVS_0100_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| CVS_0160_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| KPS_0120_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| KPS_0120_GWL_2 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| KPS_0160_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| KPS_0160_GWL_2 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| KPS_0160_GWL_3 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| MS_0100_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| MS_0200_GWL_1 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| MS_0200_GWL_2 | >100 | >100 | 45 | 4.7 | >100 | 82 | 18 | 2.3 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |
| SS_1300_GWL_5 | | | | | | | | |

| **Zn klei** | **L ≤ 10 m Kd,vul** | | | | **L > 10 m Kd,vul** | | | |
|---|---|---|---|---|---|---|---|---|
| **GWL** | **<50** | **50-100** | **100-500** | **>500** | **<50** | **50-100** | **100-500** | **>500** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLKS_0160_GWL_1m | | | | | | | | |
| BLKS_0160_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_1m | | | | | | | | |
| BLKS_0400_GWL_1s | | | | | | | | |
| BLKS_0400_GWL_2m | | | | | | | | |
| BLKS_0400_GWL_2s | | | | | | | | |
| BLKS_0600_GWL_1 | | | | | | | | |
| BLKS_0600_GWL_2 | | | | | | | | |
| BLKS_0600_GWL_3 | | | | | | | | |
| BLKS_1000_GWL_1s | | | | | | | | |
| BLKS_1000_GWL_2s | | | | | | | | |
| BLKS_1100_GWL_1m | | | | | | | | |
| BLKS_1100_GWL_1s | | | | | | | | |
| BLKS_1100_GWL_2m | | | | | | | | |
| BLKS_1100_GWL_2s | | | | | | | | |
| CKS_0200_GWL_1 | 17.6 | 9.4 | 2.4 | 1.2 | 2.3 | 1.5 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | 20.2 | 10.7 | 2.6 | 1.2 | 2.6 | 1.6 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | 19.2 | 10.2 | 2.5 | 1.2 | 2.5 | 1.6 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | 24.8 | 13.1 | 3.0 | 1.3 | 2.9 | 1.8 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | | | | |
| CVS_0160_GWL_1 | | | | | | | | |
| CVS_0400_GWL_1 | | | | | | | | |
| CVS_0600_GWL_1 | | | | | | | | |
| CVS_0600_GWL_2 | | | | | | | | |
| CVS_0800_GWL_1 | | | | | | | | |
| CVS_0800_GWL_2 | | | | | | | | |
| CVS_0800_GWL_3 | | | | | | | | |
| KPS_0120_GWL_1 | | | | | | | | |
| KPS_0120_GWL_2 | | | | | | | | |
| KPS_0160_GWL_1 | | | | | | | | |
| KPS_0160_GWL_2 | | | | | | | | |
| KPS_0160_GWL_3 | | | | | | | | |
| MS_0100_GWL_1 | 23.0 | 12.1 | 2.9 | 1.3 | 2.8 | 1.7 | 1.0 | 1.0 |
| MS_0200_GWL_1 | 19.2 | 10.2 | 2.5 | 1.2 | 2.5 | 1.6 | 1.0 | 1.0 |
| MS_0200_GWL_2 | 25.4 | 13.4 | 3.1 | 1.3 | 3.0 | 1.8 | 1.0 | 1.0 |
| SS_1000_GWL_1 | | | | | | | | |
| SS_1000_GWL_2 | | | | | | | | |
| SS_1300_GWL_1 | | | | | | | | |
| SS_1300_GWL_2 | | | | | | | | |
| SS_1300_GWL_3 | | | | | | | | |
| SS_1300_GWL_4 | | | | | | | | |

| | | |
|---|---|---|
| SS_1300_GWL_5 | | |

## D2 PAK's

| benzo(a)pyreen | %OC,vul | | | |
|---|---|---|---|---|
| L (m) | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| ≤10 | 2.7 | 1.1 | 1.0 | *1.0* |
| >10 | 1.0 | 1.0 | 1.0 | *1.0* |

| benzo(b)fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| L (m) | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| ≤10 | 2.7 | 1.1 | 1.0 | 1.0 |
| >10 | 1.0 | 1.0 | 1.0 | 1.0 |

| benzo(ghi)peryleen | %OC,vul | | | |
|---|---|---|---|---|
| L (m) | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| ≤10 | 1.3 | 1.1 | 1.0 | 1.0 |
| >10 | 1.0 | 1.0 | 1.0 | 1.0 |

| benzo(k)fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| L (m) | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| ≤10 | 2.7 | 1.1 | 1.0 | 1.0 |
| >10 | 1.0 | 1.0 | 1.0 | 1.0 |

| fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| L (m) | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| ≤10 | 2.7 | 1.1 | 1.0 | 1.0 |
| >10 | 1.0 | 1.0 | 1.0 | 1.0 |

| indeno(123-cd)pyreen | %OC,vul | | | |
|---|---|---|---|---|
| L (m) | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| ≤10 | 1.0 | 1.0 | 1.0 | 1.0 |
| >10 | 1.0 | 1.0 | 1.0 | 1.0 |

## D3 Gechloreerde solventen

| tetrachlooretheen | %OC,vul | | | |
|---|---|---|---|---|
| L (m) | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| ≤10 | 2.7 | 1.4 | 1.1 | 1.0 |
| >10 | 1.0 | 1.0 | 1.0 | 1.0 |

| trichlooretheen | %OC,vul | | | |
|---|---|---|---|---|
| L (m) | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |

| | | | | |
|---|---|---|---|---|
| **≤10** | 2.7 | 1.7 | 1.3 | 1.0 |
| **>10** | 1.0 | 1.0 | 1.0 | 1.0 |

## D4 Cyanide

| **cyanide** | **%OC,vul** | | | |
|---|---|---|---|---|
| **L (m)** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **≤10** | 2.7 | 1.2 | 1.1 | 1.0 |
| **>10** | 1.0 | 1.0 | 1.0 | 1.0 |

## D5 PCB's

| **PCB** | **%OC,vul** | | | |
|---|---|---|---|---|
| **L (m)** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **≤10** | 2.7 | 1.1 | 1.0 | 1.0 |
| **>10** | 1.0 | 1.0 | 1.0 | 1.0 |

# BIJLAGE E: ATTENUATIEFACTOR VOOR TRANSPORT DOOR ONVERZADIGDE BODEM MET MKN UIT VLAREM II

Volgende tabellen geven $AF_{bodem}$ voor de verschillende parameters opgenomen in VLAREM II bijlage 2.4.1 voor verschillende diktes van de opvulling, $K_d$ van de onderliggende bodem (1 m dikte) en $K_d$ van het vulmateriaal. De milieukwaliteitsnormen in grondwater zijn de grondwaterkwaliteitsnormen en drempelwaarden opgenomen in VLAREM II (bijlage 2.4.1). Binnen de tabellen zijn domeinen afgebakend (cursief gedrukte grijze gebieden) die de scenario's aflijnen waar concentraties in de aangevoerde bodemmaterialen, lager dan BSN type III, geen aanleiding geven tot overschrijding van de grondwaterkwaliteitsnorm/drempelwaarde uit VLAREM II in het grondwater net onder de groeve en waar de berekening dus niet uitgevoerd hoeft te worden.

## E1 Metalen

### a) $d_{vul}$ ≤ 10 m

| **As**<br>**$d_{vul}$ ≤ 10 m** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| | **$K_d$,bodem** | **<50** | **50-100** | **100-500** | **>500** |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.2 | 1.4 | 1.0 | 1.0 |
| **BLKS_0600_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.2 | 1.4 | 1.0 | 1.0 |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.8 | 1.2 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.8 | 1.2 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.4 | 1.0 | 1.0 |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.2 | 1.4 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.4 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.3 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.4 | 1.0 | 1.0 |
| **CVS_0400_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.2 | 1.4 | 1.0 | 1.0 |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **CVS_0800_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.9 | 1.3 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.4 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.4 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 2.0 | 1.4 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.4 | 1.0 | 1.0 |
| **SS_1000_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.4 | 1.0 | 1.0 |
| **SS_1300_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.6 | 1.2 | 1.0 | 1.0 |
| **SS_1300_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.1 | 1.4 | 1.0 | 1.0 |
| **SS_1300_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.3 | 1.0 | 1.0 |
| **SS_1300_GWL_4** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.2 | 1.4 | 1.0 | 1.0 |
| **SS_1300_GWL_5** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.0 | 1.3 | 1.0 | 1.0 |

| **Cd**<br>**$d_{vul}$ ≤ 10 m**<br>**$K_d$,bodem** | **$K_d$,vul**<br>**<50** | **50-100** | **100-500** | **>500** |
|---|---|---|---|---|
| **BLKS_0160_GWL_1m** | | | | |
| **BLKS_0160_GWL_1s** | | | | |
| **BLKS_0400_GWL_1m** | | | | |
| **BLKS_0400_GWL_1s** | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **BLKS_0400_GWL_2m** | | | | | |
| **BLKS_0400_GWL_2s** | | | | | |
| **BLKS_0600_GWL_1** | | | | | |
| **BLKS_0600_GWL_2** | | | | | |
| **BLKS_0600_GWL_3** | | | | | |
| **BLKS_1000_GWL_1s** | | | | | |
| **BLKS_1000_GWL_2s** | | | | | |
| **BLKS_1100_GWL_1m** | | | | | |
| **BLKS_1100_GWL_1s** | | | | | |
| **BLKS_1100_GWL_2m** | | | | | |
| **BLKS_1100_GWL_2s** | | | | | |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | | | | | |
| **CVS_0160_GWL_1** | | | | | |
| **CVS_0400_GWL_1** | | | | | |
| **CVS_0600_GWL_1** | | | | | |
| **CVS_0600_GWL_2** | | | | | |
| **CVS_0800_GWL_1** | | | | | |
| **CVS_0800_GWL_2** | | | | | |
| **CVS_0800_GWL_3** | | | | | |
| **KPS_0120_GWL_1** | | | | | |
| **KPS_0120_GWL_2** | | | | | |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | | |
| **SS_1000_GWL_2** | | | | | |
| **SS_1300_GWL_1** | | | | | |
| **SS_1300_GWL_2** | | | | | |
| **SS_1300_GWL_3** | | | | | |
| **SS_1300_GWL_4** | | | | | |
| **SS_1300_GWL_5** | | | | | |

| **Ni** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| **$d_{vul}$ ≤ 10 m** | | **<50** | **50-100** | **100-500** | **>500** |
| | **$K_d$,bodem** | | | | |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **BLKS_0600_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **CVS_0400_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| **CVS_0800_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **KPS_0160_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **KPS_0160_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.4 | 1.5 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **SS_1000_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **SS_1300_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.5 | 1.0 | 1.0 |
| **SS_1300_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **SS_1300_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **SS_1300_GWL_4** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |
| **SS_1300_GWL_5** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.3 | 1.4 | 1.0 | 1.0 |

| **Pb** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| **$d_{vul}$ ≤ 10 m** | | **<50** | **50-100** | **100-500** | **>500** |
| | **$K_d$,bodem** | | | | |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | | | | | |
| **BLKS_0400_GWL_2s** | | | | | |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | | | | | |
| **BLKS_0600_GWL_3** | | | | | |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | | | | | |
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2m** | | | | | |
| **BLKS_1100_GWL_2s** | | | | | |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | | | | | |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0400_GWL_1** | | | | | |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | | | | | |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_2** | | | | | |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | | |
| **SS_1000_GWL_2** | | | | | |
| **SS_1300_GWL_1** | | | | | |
| **SS_1300_GWL_2** | | | | | |
| **SS_1300_GWL_3** | | | | | |
| **SS_1300_GWL_4** | | | | | |
| **SS_1300_GWL_5** | | | | | |

| **Zn**<br>**$d_{vul}$ ≤ 10 m**<br>**$K_d$,bodem** | **$K_d$,vul**<br>**<50** | **50-100** | **100-500** | **>500** |
|---|---|---|---|---|
| **BLKS_0160_GWL_1m** | | | | |
| **BLKS_0160_GWL_1s** | | | | |
| **BLKS_0400_GWL_1m** | | | | |
| **BLKS_0400_GWL_1s** | | | | |
| **BLKS_0400_GWL_2m** | | | | |
| **BLKS_0400_GWL_2s** | | | | |
| **BLKS_0600_GWL_1** | | | | |
| **BLKS_0600_GWL_2** | | | | |
| **BLKS_0600_GWL_3** | | | | |
| **BLKS_1000_GWL_1s** | | | | |
| **BLKS_1000_GWL_2s** | | | | |
| **BLKS_1100_GWL_1m** | | | | |
| **BLKS_1100_GWL_1s** | | | | |
| **BLKS_1100_GWL_2m** | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **BLKS_1100_GWL_2s** | | | | | |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.6 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.6 | 1.0 | 1.0 |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.6 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | | | | | |
| **CVS_0160_GWL_1** | | | | | |
| **CVS_0400_GWL_1** | | | | | |
| **CVS_0600_GWL_1** | | | | | |
| **CVS_0600_GWL_2** | | | | | |
| **CVS_0800_GWL_1** | | | | | |
| **CVS_0800_GWL_2** | | | | | |
| **CVS_0800_GWL_3** | | | | | |
| **KPS_0120_GWL_1** | | | | | |
| **KPS_0120_GWL_2** | | | | | |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |
| | **>500** | 2.5 | 1.6 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.1 | 1.0 | 1.0 | 1.0 |

| | | | | |
|---|---|---|---|---|
| **>500** | 2.5 | 1.5 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | |
| **SS_1000_GWL_2** | | | | |
| **SS_1300_GWL_1** | | | | |
| **SS_1300_GWL_2** | | | | |
| **SS_1300_GWL_3** | | | | |
| **SS_1300_GWL_4** | | | | |
| **SS_1300_GWL_5** | | | | |

### b) 10 m < $d_{vul}$ < 20 m

| **As**<br>**10 m < $d_{vul}$ < 20 m** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| | **$K_d$,bodem** | **<50** | **50-100** | **100-500** | **>500** |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0600_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.0 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.2 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.2 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **CVS_0400_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **CVS_0800_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **SS_1000_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.2 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_4** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_5** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.3 | 1.1 | 1.0 | 1.0 |

| **Cd**<br>**10 m < $d_{vul}$ < 20 m**<br>**$K_d$,bodem** | **$K_d$,vul**<br>**<50** | **50-100** | **100-500** | **>500** |
|---|---|---|---|---|
| **BLKS_0160_GWL_1m** | | | | |
| **BLKS_0160_GWL_1s** | | | | |
| **BLKS_0400_GWL_1m** | | | | |
| **BLKS_0400_GWL_1s** | | | | |
| **BLKS_0400_GWL_2m** | | | | |
| **BLKS_0400_GWL_2s** | | | | |
| **BLKS_0600_GWL_1** | | | | |
| **BLKS_0600_GWL_2** | | | | |
| **BLKS_0600_GWL_3** | | | | |
| **BLKS_1000_GWL_1s** | | | | |
| **BLKS_1000_GWL_2s** | | | | |
| **BLKS_1100_GWL_1m** | | | | |
| **BLKS_1100_GWL_1s** | | | | |
| **BLKS_1100_GWL_2m** | | | | |
| **BLKS_1100_GWL_2s** | | | | |
| **CKS_0200_GWL_1** **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CKS_0220_GWL_1** **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | | | | | |
| **CVS_0160_GWL_1** | | | | | |
| **CVS_0400_GWL_1** | | | | | |
| **CVS_0600_GWL_1** | | | | | |
| **CVS_0600_GWL_2** | | | | | |
| **CVS_0800_GWL_1** | | | | | |
| **CVS_0800_GWL_2** | | | | | |
| **CVS_0800_GWL_3** | | | | | |
| **KPS_0120_GWL_1** | | | | | |
| **KPS_0120_GWL_2** | | | | | |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | | |
| **SS_1000_GWL_2** | | | | | |
| **SS_1300_GWL_1** | | | | | |
| **SS_1300_GWL_2** | | | | | |
| **SS_1300_GWL_3** | | | | | |
| **SS_1300_GWL_4** | | | | | |
| **SS_1300_GWL_5** | | | | | |

| **Ni** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| **10 m < $d_{vul}$ < 20 m** | | **<50** | **50-100** | **100-500** | **>500** |
| | **$K_d$,bodem** | | | | |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_0600_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| **CVS_0400_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CVS_0800_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **KPS_0160_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **KPS_0160_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **SS_1000_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_4** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |
| **SS_1300_GWL_5** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.4 | 1.1 | 1.0 | 1.0 |

| **Pb**<br>**10 m < $d_{vul}$ < 20 m** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| | **$K_d$,bodem** | **<50** | **50-100** | **100-500** | **>500** |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | | | | | |
| **BLKS_0400_GWL_2s** | | | | | |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | | | | | |
| **BLKS_0600_GWL_3** | | | | | |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | | | | | |
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2m** | | | | | |
| **BLKS_1100_GWL_2s** | | | | | |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | | | | | |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0400_GWL_1** | | | | | |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | | | | | |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_2** | | | | | |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | | |
| **SS_1000_GWL_2** | | | | | |
| **SS_1300_GWL_1** | | | | | |
| **SS_1300_GWL_2** | | | | | |
| **SS_1300_GWL_3** | | | | | |
| **SS_1300_GWL_4** | | | | | |
| **SS_1300_GWL_5** | | | | | |

| **Zn** | **$K_d$,vul** | | | |
|---|---|---|---|---|
| **10 m < $d_{vul}$ < 20 m** | **<50** | **50-100** | **100-500** | **>500** |

| $K_d$,bodem | | | | | |
|---|---|---|---|---|---|
| BLKS_0160_GWL_1m | | | | | |
| BLKS_0160_GWL_1s | | | | | |
| BLKS_0400_GWL_1m | | | | | |
| BLKS_0400_GWL_1s | | | | | |
| BLKS_0400_GWL_2m | | | | | |
| BLKS_0400_GWL_2s | | | | | |
| BLKS_0600_GWL_1 | | | | | |
| BLKS_0600_GWL_2 | | | | | |
| BLKS_0600_GWL_3 | | | | | |
| BLKS_1000_GWL_1s | | | | | |
| BLKS_1000_GWL_2s | | | | | |
| BLKS_1100_GWL_1m | | | | | |
| BLKS_1100_GWL_1s | | | | | |
| BLKS_1100_GWL_2m | | | | | |
| BLKS_1100_GWL_2s | | | | | |
| CKS_0200_GWL_1 | <50 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 50-100 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 100-500 | 1.0 | 1.0 | 1.0 | 1.0 |
| | >500 | 1.6 | 1.1 | 1.0 | 1.0 |
| CKS_0200_GWL_2 | <50 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 50-100 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 100-500 | 1.0 | 1.0 | 1.0 | 1.0 |
| | >500 | 1.6 | 1.1 | 1.0 | 1.0 |
| CKS_0220_GWL_1 | <50 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 50-100 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 100-500 | 1.0 | 1.0 | 1.0 | 1.0 |
| | >500 | 1.6 | 1.1 | 1.0 | 1.0 |
| CKS_0250_GWL_1 | <50 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 50-100 | 1.0 | 1.0 | 1.0 | 1.0 |
| | 100-500 | 1.0 | 1.0 | 1.0 | 1.0 |
| | >500 | 1.5 | 1.1 | 1.0 | 1.0 |
| CVS_0100_GWL_1 | | | | | |
| CVS_0160_GWL_1 | | | | | |
| CVS_0400_GWL_1 | | | | | |
| CVS_0600_GWL_1 | | | | | |
| CVS_0600_GWL_2 | | | | | |
| CVS_0800_GWL_1 | | | | | |
| CVS_0800_GWL_2 | | | | | |
| CVS_0800_GWL_3 | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **KPS_0120_GWL_1** | | | | | |
| **KPS_0120_GWL_2** | | | | | |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.6 | 1.1 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.5 | 1.1 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | | |
| **SS_1000_GWL_2** | | | | | |
| **SS_1300_GWL_1** | | | | | |
| **SS_1300_GWL_2** | | | | | |
| **SS_1300_GWL_3** | | | | | |
| **SS_1300_GWL_4** | | | | | |
| **SS_1300_GWL_5** | | | | | |

### c) $d_{vul}$ > 20 m

| **As**<br>**$d_{vul}$ > 20 m** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| | **$K_d$,bodem** | **<50** | **50-100** | **100-500** | **>500** |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| **BLKS_1100_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0400_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_4** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_5** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |

| **Cd** | **$K_d$,vul** | | | |
|---|---|---|---|---|
| **$d_{vul}$ > 20 m** | **<50** | **50-100** | **100-500** | **>500** |
| **$K_d$,bodem** | | | | |
| **BLKS_0160_GWL_1m** | | | | |
| **BLKS_0160_GWL_1s** | | | | |
| **BLKS_0400_GWL_1m** | | | | |
| **BLKS_0400_GWL_1s** | | | | |
| **BLKS_0400_GWL_2m** | | | | |
| **BLKS_0400_GWL_2s** | | | | |
| **BLKS_0600_GWL_1** | | | | |
| **BLKS_0600_GWL_2** | | | | |
| **BLKS_0600_GWL_3** | | | | |
| **BLKS_1000_GWL_1s** | | | | |
| **BLKS_1000_GWL_2s** | | | | |
| **BLKS_1100_GWL_1m** | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **BLKS_1100_GWL_1s** | | | | | |
| **BLKS_1100_GWL_2m** | | | | | |
| **BLKS_1100_GWL_2s** | | | | | |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | | | | | |
| **CVS_0160_GWL_1** | | | | | |
| **CVS_0400_GWL_1** | | | | | |
| **CVS_0600_GWL_1** | | | | | |
| **CVS_0600_GWL_2** | | | | | |
| **CVS_0800_GWL_1** | | | | | |
| **CVS_0800_GWL_2** | | | | | |
| **CVS_0800_GWL_3** | | | | | |
| **KPS_0120_GWL_1** | | | | | |
| **KPS_0120_GWL_2** | | | | | |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | | |
| **SS_1000_GWL_2** | | | | | |
| **SS_1300_GWL_1** | | | | | |
| **SS_1300_GWL_2** | | | | | |
| **SS_1300_GWL_3** | | | | | |
| **SS_1300_GWL_4** | | | | | |
| **SS_1300_GWL_5** | | | | | |

| **Ni**<br>**$d_{vul}$ > 20 m** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| | **$K_d$,bodem** | **<50** | **50-100** | **100-500** | **>500** |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0400_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_4** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1300_GWL_5** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |

| **Pb**<br>**$d_{vul}$ > 20 m** | | **$K_d$,vul** | | | |
|---|---|---|---|---|---|
| | **$K_d$,bodem** | **<50** | **50-100** | **100-500** | **>500** |
| **BLKS_0160_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0160_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0400_GWL_2m** | | | | | |
| **BLKS_0400_GWL_2s** | | | | | |
| **BLKS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_0600_GWL_2** | | | | | |
| **BLKS_0600_GWL_3** | | | | | |
| **BLKS_1000_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1000_GWL_2s** | | | | | |
| **BLKS_1100_GWL_1m** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_1s** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **BLKS_1100_GWL_2m** | | | | | |
| **BLKS_1100_GWL_2s** | | | | | |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | | | | | |
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| **CVS_0400_GWL_1** | | | | | |
| **CVS_0600_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0600_GWL_2** | | | | | |
| **CVS_0800_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0800_GWL_2** | | | | | |
| **CVS_0800_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0120_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **KPS_0160_GWL_3** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | | |
| **SS_1000_GWL_2** | | | | | |
| **SS_1300_GWL_1** | | | | | |
| **SS_1300_GWL_2** | | | | | |
| **SS_1300_GWL_3** | | | | | |
| **SS_1300_GWL_4** | | | | | |
| **SS_1300_GWL_5** | | | | | |

| **Zn**<br>**$d_{vul}$ > 20 m**<br>**$K_d$,bodem** | **$K_d$,vul**<br>**<50** | **50-100** | **100-500** | **>500** |
|---|---|---|---|---|
| **BLKS_0160_GWL_1m** | | | | |
| **BLKS_0160_GWL_1s** | | | | |
| **BLKS_0400_GWL_1m** | | | | |
| **BLKS_0400_GWL_1s** | | | | |
| **BLKS_0400_GWL_2m** | | | | |
| **BLKS_0400_GWL_2s** | | | | |
| **BLKS_0600_GWL_1** | | | | |
| **BLKS_0600_GWL_2** | | | | |
| **BLKS_0600_GWL_3** | | | | |
| **BLKS_1000_GWL_1s** | | | | |
| **BLKS_1000_GWL_2s** | | | | |
| **BLKS_1100_GWL_1m** | | | | |
| **BLKS_1100_GWL_1s** | | | | |
| **BLKS_1100_GWL_2m** | | | | |
| **BLKS_1100_GWL_2s** | | | | |
| **CKS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | | |
|---|---|---|---|---|---|
| **CKS_0220_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CKS_0250_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **CVS_0100_GWL_1** | | | | | |
| **CVS_0160_GWL_1** | | | | | |
| **CVS_0400_GWL_1** | | | | | |
| **CVS_0600_GWL_1** | | | | | |
| **CVS_0600_GWL_2** | | | | | |
| **CVS_0800_GWL_1** | | | | | |
| **CVS_0800_GWL_2** | | | | | |
| **CVS_0800_GWL_3** | | | | | |
| **KPS_0120_GWL_1** | | | | | |
| **KPS_0120_GWL_2** | | | | | |
| **KPS_0160_GWL_1** | | | | | |
| **KPS_0160_GWL_2** | | | | | |
| **KPS_0160_GWL_3** | | | | | |
| **MS_0100_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_1** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **MS_0200_GWL_2** | **<50** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **50-100** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **100-500** | 1.0 | 1.0 | 1.0 | 1.0 |
| | **>500** | 1.0 | 1.0 | 1.0 | 1.0 |
| **SS_1000_GWL_1** | | | | | |
| **SS_1000_GWL_2** | | | | | |
| **SS_1300_GWL_1** | | | | | |
| **SS_1300_GWL_2** | | | | | |
| **SS_1300_GWL_3** | | | | | |
| **SS_1300_GWL_4** | | | | | |
| **SS_1300_GWL_5** | | | | | |

## E2 PAK's

### a) $d_{vul} \leq 10$ m

| benzo(a)pyreen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-6.0** | 1.1 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 2.8 | 1.2 | 1.1 | *1.1* |

| benzo(b)fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 4.3 | 1.2 | 1.0 | 1.0 |

| benzo(ghi)peryleen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.3 | 1.2 | 1.0 | 1.0 |

| benzo(k)fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 3.8 | 1.2 | 1.0 | 1.0 |

| fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 4.3 | 1.2 | 1.0 | 1.0 |

| indeno(123-cd)pyreen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |

| | | | | |
|---|---|---|---|---|
| **<0.5** | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 1.0 | 1.0 | 1.0 | *1.0* |

### b) 10 m < $d_{vul}$ ≤ 20 m

| **benzo(a)pyreen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 2.3 | 1.1 | 1.1 | *1.1* |

| **benzo(b)fluoranteen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.3 | 1.0 | 1.0 | 1.0 |

| **benzo(ghi)peryleen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.3 | 1.0 | 1.0 | 1.0 |

| **benzo(k)fluoranteen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.2 | 1.0 | 1.0 | 1.0 |

| **fluoranteen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.2 | 1.0 | 1.0 | 1.0 |

| indeno(123-cd)pyreen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 1.0 | 1.0 | 1.0 | *1.0* |

### c) $d_{vul}$ > 20 m

| benzo(a)pyreen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 1.2 | 1.1 | 1.1 | *1.1* |

| benzo(b)fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 |

| benzo(ghi)peryleen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 |

| benzo(k)fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 |

| fluoranteen | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | |
|---|---|---|---|---|
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 |

| **indeno(123-cd)pyreen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | *1.0* |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | *1.0* |
| **>6.0** | 1.0 | 1.0 | 1.0 | *1.0* |

## E3 Gechloreerde solventen

### a) $d_{vul} \leq 10$ m

| **tetrachlooretheen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.6 | 1.2 | 1.0 | 1.0 |

| **trichlooretheen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.9 | 1.1 | 1.0 | 1.0 |

### b) 10 m < $d_{vul} \leq 20$ m

| **tetrachlooretheen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.6 | 1.0 | 1.0 | 1.0 |

| **trichlooretheen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |

| | | | | |
|---|---|---|---|---|
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 |

### c) $d_{vul}$ > 20 m

| **tetrachlooretheen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 |

| **trichlooretheen** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.0 | 1.0 | 1.0 | 1.0 |

## E4 Cyanide

### a) $d_{vul}$ ≤ 10 m

| **cyanide** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.7 | 1.2 | 1.0 | 1.0 |

### b) 10 m < $d_{vul}$ ≤ 20 m

| **cyanide** | **%OC,vul** | | | |
|---|---|---|---|---|
| **%OC,bodem** | **<0.5** | **0.5-1.0** | **1.0-6.0** | **>6.0** |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.9 | 1.0 | 1.0 | 1.0 |

### c) $d_{vul}$ > 20 m

| **cyanide** | **%OC,vul** |
|---|---|

| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
|---|---|---|---|---|
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.1 | 1.0 | 1.0 | 1.0 |

## E5 PCB's

### a) $d_{vul} \leq 10$ m

| PCB | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.1 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 4.3 | 1.2 | 1.0 | 1.0 |

### b) 10 m < $d_{vul} \leq 20$ m

| PCB | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 2.3 | 1.0 | 1.0 | 1.0 |

### c) $d_{vul} > 20$ m

| PCB | %OC,vul | | | |
|---|---|---|---|---|
| %OC,bodem | <0.5 | 0.5-1.0 | 1.0-6.0 | >6.0 |
| **<0.5** | 1.0 | 1.0 | 1.0 | 1.0 |
| **0.5-1.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **1.0-6.0** | 1.0 | 1.0 | 1.0 | 1.0 |
| **>6.0** | 1.2 | 1.0 | 1.0 | 1.0 |