

Final report

S-Risk for the Walloon region - substance data sheets part 2: BTEX, styrene, phenol and trimethylbenzenes

C. Cornelis, J. Bierkens, A. Standaert

Adapted for the Walloon Region by S. Crévecoeur (ISSEP)

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VITO NV

Boeretang 200 - 2400 MOL - BELGIE
Tel. + 32 14 33 55 11 - Fax + 32 14 33 55 99
vito@vito.be - www.vito.be

BTW BE-0244.195.916 RPR (Turnhout)
Bank 375-1117354-90 ING
BE34 3751 1173 5490 - BBRUBEBB

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LIST OF ACRONYMS

| | |
|----------------|-----------------------------------------------------------------------------|
| ABS | Absorption factor |
| Al | Aluminum content |
| BCF | Bioconcentration factor |
| BTEXS | benzene, toluene, ethylbenzene, styrene |
| BTF | Biotransfer factor |
| Da | Diffusion coefficient in air |
| Dpe | Diffusion coefficient in polyethylene |
| Dpvc | Diffusion coefficient in PVC |
| Dw | Diffusion coefficient in water |
| FA | Factor used when calculating dermal absorption from water |
| Fe | Iron content |
| ISSeP | Institut Scientifique de Service Public |
| K _d | Sorption coefficient soil-water |
| Koa | Distribution coefficient octanol-air |
| Koc | Distribution coefficient organic carbon-water |
| Kow | Distribution coefficient octanol-water |
| Kp | Dermal permeability coefficient |
| MTBE | methyl-t-butylether |
| OVAM | Openbare Vlaamse Afvalstoffenmaatschappij (Public Waste Agency of Flanders) |
| PAK | polycyclic aromatic hydrocarbons |
| Ptot | Total phosphorus content |
| TCL | Tolerable Concentration in Air |
| TDI | Tolerable Daily Intake |
| TGD | Technical Guidance Document |

LIST OF MODIFICATIONS

| Date | Modification |
|------|--------------|
| | |

INTRODUCTION

The **substance data sheets** summarise the data as available in S-Risk 1.0 for the **Walloon region**. The substance data sheets are a copy of those used for the S-Risk Flanders version. They are not based on the Annexe B4 (“propriétés physico-chimiques de référence pour les polluants normés”) of the GRER part B version 2.0. The differences between the Flemish and Walloon Region are highlighted using **W** (representing data used only in the Walloon version). Physiological parameters and BCF/BTF are the same for the two regions. The three main differences are:

- Toxicological values (values recently revised and harmonized in Wallonia);
- Carcinogenicity revision;
- Limit values used in Wallonia are regulatory values only (“code de l’eau” for drinking water and AGW, 2010 and EC, 2004 for outdoor air). No limit values in indoor air nor in plants and meats are proposed.
- All background values are set to “0” (background values are not taken into account in Wallonia).

Substance data sheets modified for the Walloon version summarize the data as available in S-Risk 1.0 for the Walloon region.

The current **substance data sheets** used for the **Flanders version** of S-Risk are a copy of those used for the calculation of the proposed soil clean-up values in Flanders, with some modifications. Following changes in model equations in S-Risk compared to the formerly used Vlier-Humaan model, some new parameter values had to be introduced. Also some supplementary options available in S-Risk required changes to the input data for which new values had to be collected. The most important changes are:

- **Dermal absorption:** Two new parameters are used that replace the formerly used parameters to calculate dermal absorption, namely the fraction adsorbed for dermal uptake via soil and dust, and the dermal permeability coefficient for dermal uptake from water. The latter parameter is combined with a parameter FA.
- **Bioconcentration factors plants (BCF):** For metals and arsenic very often either the BCF for maize or the BCF for grass was missing. In these cases the same BCF was used for maize and grass. Because this is incorrect, there is a need to search for additional BCFs.
- **Bioconcentration factors plants (BCF):** for organic compounds plant uptake in S-Risk can either be calculated starting from substance- and plant-specific characteristics or directly from BCF values expressed in mg/kg dm in the plant per mg/m³ soil solution. For most organic substances plant uptake is calculated. For some organic substances however, BCF values reported in the original (Vlier-Humaan) data sheets had units of mg/kg dm in the plant per mg/kg dm in the soil, which are incompatible with the current S-Risk version. For these substances plant- and substance specific characteristics were used to calculate plant uptake. If so, this is mentioned in the data sheets.
- **Biotransfer factors animal products (BTF):** S-Risk allows to specify BTF animal products by meat, milk, kidney and liver. For inorganic substances BTF values need to be filled in. The original data sheets only provided values for meat and milk. Lacking values were collected from De Raeymaecker et al. (2005). For organic substances model calculations are always used to obtain BTF values.
- **Biotransfer factors eggs (BTF):** S-Risk allows the user to calculate transfer to chicken eggs. This is a new feature as compared to Vlier-Humaan. However, using default settings in S-Risk this exposure route is not activated. For metals biotransfer factors to eggs have been collected and are included in the substance data sheets. For organic substances no BTF

have been collected and their value has been equaled to zero. When the exposure route to eggs is activated in S-Risk the user should enter appropriate BTF values.

- **Toxicity data:** The toxicity data in S-Risk are copied from the original substance data sheets. In contrast to Vlier-Humaan, where calculations were only possible for systemic effects and either carcinogenic or non-carcinogenic effects, S-Risk allows to make calculations for several endpoints simultaneously. As a consequence, the toxicity data in the current substance data sheets are sometimes more extensive than in the former ones.
- **Background exposure and background concentrations:** Vlier-Humaan did only allow to enter one value for background exposure (be it depending on the type of land use) via food. In S-Risk it is possible to enter age-dependent background exposure via food. Default ratios are most often used for age-dependency (according to the ratios specified in the TGD). Differences between land-uses are taken into account based on the background concentrations for food that have been entered. S-Risk also separately calculates background exposure via drinking water.
- **Limit values for food:** For some substances calculated concentrations in food stuffs have to comply with existing standards. With this in mind recent legislation has been scrutinised and obsolete values were replaced by more recent ones when appropriate.

The existing information, which was copied in S-Risk is based on the following original substance data sheets:

- Heavy metals: OVAM (2009c) and (OVAM, 2009d) with accompanying spreadsheet;
- BTEXS: OVAM (2009a);
- Chlorinated aliphatic substances: OVAM (2004) for 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, dichloromethane, tetrachloroethene, tetrachloromethane, trichloroethene; OVAM (2009b) for 1,2-dichloroethane, vinyl chloride, trichloromethane (chloroform);
- Chloro-aromatics: OVAM (2004); OVAM (2009b) for hexachloro-benzene;
- PAHs: OVAM (2003a) for PAHs; OVAM (2005a) for changes in the evaluation criteria for benzo(a)pyrene and dibenzo(a,h)anthracene;
- Cyanides: OVAM (2004);
- Trimethylbenzenes: OVAM (2003b);
- Chlorophenols: OVAM (2005b)
- Hexane, heptane, octane: OVAM (2004);
- MTBE: OVAM (2003a)

Details on the new information are always available in the report discussing the calculation of clean-up values with S-Risk (Cornelis, Bierkens, and Standaert, 2013). Newly added or modified information compared to the original data sheets is clearly indicated in the S-Risk substance data sheets.

Changes entered after publication of the first version of the substance datasheets are listed in the section "List of modifications".

The substance data sheets consist of 6 documents:

- Part 1: Substance data sheets metals and arsenic
- **Part 2: Substance data sheets benzene, toluene, ethylbenzene, xylenes, styrene, phenol and trimethylbenzenes**
- Part 3: Substance data sheets chlorinated aliphatic substances, chlorobenzenes and chlorophenols

- Part 4: Substance data sheets polycyclic aromatic hydrocarbons
- Part 5: Substance data sheets alkanes, MTBE and cyanides
- Part 6: Substance data sheets total petroleum hydrocarbons.

CHAPTER 2. SUBSTANCE DATA SHEETS BTEX, STYRENE AND PHENOL

Data on substances that do not derive from the former substance data sheets are indicated with **N**, accompanied with some explanation if appropriate. Detailed information on all new entries is given in Cornelis et al. (2013). Data on substances that differ from Flanders are indicated with **W**. Volatile pollutants (vapour pressure > 0.1Pa at 20°C) are highlighted in the document.

2.1. BENZENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|-----------------------|------------------------------------------------|
| CAS nr. | | 71-43-2 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 78.11 | |
| Solubility | mg/l | 1777 (25°C) | average |
| Vapour pressure* | Pa | 12516 (25°C) | average |
| Henry coefficient | Pa m ³ /mol | 552 (25°C) | average |
| log Kow | g/g | 2.13 | Geometric mean |
| log Koc | dm ³ /kg | 1.9 | Geometric mean |
| Log Koa | g/g | calculated | N |
| BCF | | calculated | |
| Dpe | m ² /d | 1.4x10 ⁻⁶ | van den Berg (1995) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.74 | average |
| Diffusion coefficient water (Dw) | m ² /d | 9.07x10 ⁻⁵ | average |
| Kp | [cm/h] | calculated | N |
| FA | - | 1 | N |
| ABS dermal soil/dust | - | 0 | N considered negligible |
| BTF beef | d/kg | calculated | N |
| BTF mutton | d/kg | calculated | |
| BTF liver | d/kg | calculated | N |
| BTF kidney | d/kg | calculated | N |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | values not searched for |
| BTF feed - egg | d/kg | 0 | values not searched for |
| Carcinogenicity | | 1 A | W IARC (2012) W US-EPA (2000) |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 5.0x10 ⁻⁴ | ATSDR (2007) |
| TCA inhalation | mg/m ³ | 3.0x10 ⁻³ | OEHHA (2014) |
| TDI dermal | mg/kg.d | 5.0x10 ⁻⁴ | = oral value |
| Systemic effects non-threshold | | | |

| Parameter | Unit | Value | Source |
|---------------------------------------|------------------------------------|-----------------------|-----------------------------------|
| Oral slope factor | (mg/kg.d) ⁻¹ | 5.5x10 ⁻² | W US-EPA (2000) |
| Inhalation unit risk | (mg/m ³) ⁻¹ | 6.0x10 ⁻³ | WHO (2000) |
| Dermal slope factor | (mg/kg.d) ⁻¹ | 5.5x10 ⁻² | W = oral value |
| Limit in outdoor air | mg/m ³ | 5.00x10 ⁻³ | W EC (2008); AGW (2010) |
| Limit value in drinking water | mg/m ³ | 1.0 | W EC (1998); Code de l'Eau (2004) |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | W |
| Dietary background children | mg/kg.day | 0 | W |
| Background potatoes | mg/kg fw | 0 | W |
| Background root crops | mg/kg fw | 0 | W |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | W |
| Background fruit vegetables | mg/kg fw | 0 | W |
| Background cabbage | mg/kg fw | 0 | W |
| Background leafy vegetables | mg/kg fw | 0 | W |
| Background legume | mg/kg fw | 0 | W |
| Background beef | mg/kg fw | 0 | W |
| Background offal | mg/kg fw | 0 | W |
| Background milk | mg/kg fw | 0 | W |
| Background butter | mg/kg fw | 0 | W |
| Background eggs | mg/kg fw | 0 | W |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | W |

* Volatile pollutant (vapour pressure > 0.1 Pa at 20°C)

2.2. TOLUENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|--------------------------|-------------------------------|
| CAS nr. | | 108-88-3 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 92.13 | |
| Solubility | mg/l | 523 (25°C) | average |
| Vapour pressure* | Pa | 3802 (25°C) | average |
| Henry coefficient | Pa m ³ /mol | 655 (25°C) | average |
| log Kow | g/g | 2.65 | Geometric mean |
| log Koc | dm ³ /kg | 2.12 | Geometric mean |
| Log Koa | g/g | calculated | |
| BCF | | calculated | |
| Dpe | m ² /d | 1.2x10 ⁻⁶ | van den Berg (1995) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.6936 | average |
| Diffusion coefficient water (Dw) | m ² /d | 7.66x10 ⁻⁵ | average |
| Kp | [cm/h] | calculated | |
| FA | - | 1 | |
| ABS dermal soil/dust | - | 3.00x10 ⁻² | US-EPA (1995, 2003b) |
| BTF beef | d/kg | calculated | |
| BTF mutton | d/kg | calculated | |
| BTF liver | d/kg | calculated | |
| BTF kidney | d/kg | calculated | |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | values not searched for |
| BTF feed - egg | d/kg | 0 | values not searched for |
| Carcinogenicity | | 3 D | IARC (1999a) US-EPA (2005) |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 8.0x10 ⁻² | US-EPA (2005) |
| TCL inhalation | mg/m ³ | 2.6x10 ⁻¹ | WHO (2000) |
| TDI dermal | mg/kg.d | 8.0x10 ⁻² | = oral TDI |
| averaging period | | Child, adolescent, adult | |
| Limit in outdoor air | mg/m ³ | - | |
| Limit value in drinking water | mg/m ³ | - | |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | |
| Dietary background children | mg/kg.day | 0 | |

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Background potatoes | mg/kg fw | 0 | W |
| Background root crops | mg/kg fw | 0 | W |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | W |
| Background fruit vegetables | mg/kg fw | 0 | W |
| Background cabbage | mg/kg fw | 0 | W |
| Background leafy vegetables | mg/kg fw | 0 | W |
| Background legume | mg/kg fw | 0 | W |
| Background beef | mg/kg fw | 0 | W |
| Background offal | mg/kg fw | 0 | W |
| Background milk | mg/kg fw | 0 | W |
| Background butter | mg/kg fw | 0 | W |
| Background eggs | mg/kg fw | 0 | W |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | |

* Volatile pollutant (vapour pressure > 0.1 Pa at 20°C)

2.3. ETHYLBENZENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------------------|--------------------------|-----------------------------------------|
| CAS nr. | | 100-41-4 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 106.2 | |
| Solubility | mg/l | 165 (25°C) | average |
| Vapour pressure* | Pa | 1280 (25°C) | average |
| Henry coefficient | Pa m ³ /mol | 788 (25°C) | average |
| log Kow | g/g | 3.15 | Geometric mean |
| log Koc | dm ³ /kg | 2.3 | Geometric mean |
| Log Koa | g/g | calculated | N |
| BCF | | calculated | |
| Dpe | m ² /d | 2.1x10 ⁻⁶ | van den Berg (1995) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.6168 | average |
| Diffusion coefficient water (Dw) | m ² /d | 7.18x10 ⁻⁵ | average |
| Kp | [cm/h] | calculated | N |
| FA | - | 1 | N |
| ABS dermal soil/dust | - | 3.00x10 ⁻² | N US-EPA (1995, 2003b) |
| BTF beef | d/kg | calculated | N |
| BTF mutton | d/kg | calculated | |
| BTF liver | d/kg | calculated | N |
| BTF kidney | d/kg | calculated | N |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | N values not searched for |
| BTF feed - egg | d/kg | 0 | N values not searched for |
| Carcinogenicity | | 2B D | W IARC (2000) US-EPA (1991) |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 9.70x10 ⁻² | WHO (2000); ATSDR (2010); US-EPA (2008) |
| TCL inhalation | mg/m ³ | 3.0 x10 ⁻¹ | W ATSDR (2010) |
| TDI dermal | mg/kg.d | 9.70x10 ⁻² | W = oral TDI |
| averaging period | | child, adolescent, adult | |
| Systemic effects non-threshold | | | |
| Oral slope factor | (mg/kg.d) ⁻¹ | 1.1x10 ⁻² | W OEHHA (2009) |
| Inhalation unit risk | (mg/m ³) ⁻¹ | 2.5x10 ⁻³ | W OEHHA (2007) |
| Dermal slope factor | (mg/kg.d) ⁻¹ | 1.1x10 ⁻² | W = oral value |
| Limit in outdoor air | mg/m ³ | - | W |
| Limit value in drinking water | mg/m ³ | - | W |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | W |
| Dietary background children | mg/kg.day | 0 | W |
| Background potatoes | mg/kg fw | 0 | W |
| Background root crops | mg/kg fw | 0 | W |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | W |
| Background fruit vegetables | mg/kg fw | 0 | W |
| Background cabbage | mg/kg fw | 0 | W |
| Background leafy vegetables | mg/kg fw | 0 | W |
| Background legume | mg/kg fw | 0 | W |
| Background beef | mg/kg fw | 0 | W |
| Background offal | mg/kg fw | 0 | W |
| Background milk | mg/kg fw | 0 | W |
| Background butter | mg/kg fw | 0 | W |
| Background eggs | mg/kg fw | 0 | W |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | W |

* Volatile pollutant (vapour pressure > 0.1 Pa at 20°C)

2.4. O-XYLENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|--------------------------|------------------------------------------------------------|
| CAS nr. | | 95-47-6 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 106.2 | |
| Solubility | mg/l | 186 (25°C) | average |
| Vapour pressure* | Pa | 889 (25°C) | average |
| Henry coefficient | Pa m ³ /mol | 548 (25°C) | average |
| log Kow | g/g | 3.07 | Geometric mean |
| log Koc | dm ³ /kg | 2.15 | Geometric mean |
| Log Koa | g/g | calculated | W |
| BCF | | calculated | |
| Dpe | m ² /d | 1.6x10 ⁻⁶ | van den Berg (1995) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.7512 | average |
| Diffusion coefficient water (Dw) | m ² /d | 7.73x10 ⁻⁵ | average |
| Kp | [cm/h] | calculated | W |
| FA | - | 1 | W |
| ABS dermal soil/dust | - | 3.00x10 ⁻² | W US-EPA (1995, 2003b) |
| BTF beef | d/kg | calculated | W |
| BTF mutton | d/kg | calculated | |
| BTF liver | d/kg | calculated | W |
| BTF kidney | d/kg | calculated | W |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | W values not searched for |
| BTF feed - egg | d/kg | 0 | W values not searched for |
| Carcinogenicity | | 3 D | IARC (1999a) US-EPA IRIS date not found, before 2002 |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 2.0x10 ⁻¹ | W ATSDR (2003) ; US-EPA (2003a) |
| TCL inhalation | mg/m ³ | 1.0x10 ⁻¹ | W US-EPA (2003a) |
| TDI dermal | mg/kg.d | 2.0x10 ⁻¹ | W = oral value |
| averaging period | | child, adolescent, adult | |
| Limit in outdoor air | mg/m ³ | - | W |
| Limit value in drinking water | mg/m ³ | - | W |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | W |

BTEX, styrene, phenol and trimethylbenzenes

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Dietary background children | mg/kg.day | 0 | W |
| Background potatoes | mg/kg fw | 0 | W |
| Background root crops | mg/kg fw | 0 | W |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | W |
| Background fruit vegetables | mg/kg fw | 0 | W |
| Background cabbage | mg/kg fw | 0 | W |
| Background leafy vegetables | mg/kg fw | 0 | W |
| Background legume | mg/kg fw | 0 | W |
| Background beef | mg/kg fw | 0 | W |
| Background offal | mg/kg fw | 0 | W |
| Background milk | mg/kg fw | 0 | W |
| Background butter | mg/kg fw | 0 | W |
| Background eggs | mg/kg fw | 0 | W |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | W |

* Volatile pollutant (vapour pressure > 0.1 Pa at 20°C)

2.5. M-XYLENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|--------------------------|------------------------------------------------------------|
| CAS nr. | | 108-38-3 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 106.2 | |
| Solubility | mg/l | 166 (25°C) | average |
| Vapour pressure* | Pa | 1121 (25°C) | average |
| Henry coefficient | Pa m ³ /mol | 710 (25°C) | average |
| log Kow | g/g | 3.18 | Geometric mean |
| log Koc | dm ³ /kg | 2.29 | Geometric mean |
| Log Koa | g/g | - | W |
| BCF | | calculated | |
| Dpe | m ² /d | 1.6x10 ⁻⁶ | van den Berg (1995) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.5952 | average |
| Diffusion coefficient water (Dw) | m ² /d | 6.74x10 ⁻⁵ | average |
| Kp | [cm/h] | calculated | W |
| FA | - | 1 | W |
| ABS dermal soil/dust | - | 3.00x10 ⁻² | W US-EPA (1995, 2003b) |
| BTF beef | d/kg | calculated | W |
| BTF mutton | d/kg | calculated | |
| BTF liver | d/kg | calculated | W |
| BTF kidney | d/kg | calculated | W |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | W values not searched for |
| BTF feed - egg | d/kg | 0 | W values not searched for |
| Carcinogenicity | | 3 D | IARC (1999a) US-EPA IRIS date not found, before 2002 |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 2.0x10 ⁻¹ | W ATSDR (2003) ; US-EPA (2003a) |
| TCL inhalation | mg/m ³ | 1.0x10 ⁻¹ | W US-EPA (2003a) |
| TDI dermal | mg/kg.d | 2.0x10 ⁻¹ | W = oral value |
| averaging period | | Child, adolescent, adult | |
| Limit in outdoor air | mg/m ³ | - | W |
| Limit value in drinking water | mg/m ³ | - | W |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | W |

BTEX, styrene, phenol and trimethylbenzenes

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Dietary background children | mg/kg.day | 0 | W |
| Background potatoes | mg/kg fw | 0 | W |
| Background root crops | mg/kg fw | 0 | W |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | W |
| Background fruit vegetables | mg/kg fw | 0 | W |
| Background cabbage | mg/kg fw | 0 | W |
| Background leafy vegetables | mg/kg fw | 0 | W |
| Background legume | mg/kg fw | 0 | W |
| Background beef | mg/kg fw | 0 | W |
| Background offal | mg/kg fw | 0 | W |
| Background milk | mg/kg fw | 0 | W |
| Background butter | mg/kg fw | 0 | W |
| Background eggs | mg/kg fw | 0 | W |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | W |

* Volatile pollutant (vapour pressure > 0.1 Pa at 20°C)

2.6. P-XYLENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|--------------------------|------------------------------------------------------------|
| CAS nr. | | 106-42-3 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 106.2 | |
| Solubility | mg/l | 179 (25°C) | average |
| Vapour pressure* | Pa | 1173 (25°C) | average |
| Henry coefficient | Pa m ³ /mol | 713 (25°C) | average |
| log Kow | g/g | 3.16 | Geometric mean |
| log Koc | dm ³ /kg | 2.47 | Geometric mean |
| Log Koa | g/g | calculated | W |
| BCF | | calculated | |
| Dpe | m ² /d | 1.6x10 ⁻⁶ | van den Berg (1995) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.6648 | average |
| Diffusion coefficient water (Dw) | m ² /d | 7.06x10 ⁻⁵ | average |
| Kp | [cm/h] | calculated | W |
| FA | - | 1 | W |
| ABS dermal soil/dust | - | 3.00x10 ⁻² | W US-EPA (1995, 2003b) |
| BTF beef | d/kg | calculated | |
| BTF mutton | d/kg | calculated | W |
| BTF liver | d/kg | calculated | W |
| BTF kidney | d/kg | calculated | W |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | W values not searched for |
| BTF feed - egg | d/kg | 0 | W values not searched for |
| Carcinogenicity | | 3 D | IARC (1999a) US-EPA IRIS date not found, before 2002 |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 2.0x10 ⁻¹ | W ATSDR (2003) ; US-EPA (2003a) |
| TCL inhalation | mg/m ³ | 1.0x10 ⁻¹ | W US-EPA (2003a) |
| TDI dermal | mg/kg.d | 2.0x10 ⁻¹ | W = oral value |
| averaging period | | child, adolescent, adult | |
| Limit in outdoor air | mg/m ³ | - | W |
| Limit value in drinking water | mg/m ³ | - | W |
| Limit value in plants | mg/kg fw | | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | W |

BTEX, styrene, phenol and trimethylbenzenes

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Dietary background children | mg/kg.day | 0 | W |
| Background potatoes | mg/kg fw | 0 | W |
| Background root crops | mg/kg fw | 0 | W |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | W |
| Background fruit vegetables | mg/kg fw | 0 | W |
| Background cabbage | mg/kg fw | 0 | W |
| Background leafy vegetables | mg/kg fw | 0 | W |
| Background legume | mg/kg fw | 0 | W |
| Background beef | mg/kg fw | 0 | W |
| Background offal | mg/kg fw | 0 | W |
| Background milk | mg/kg fw | 0 | W |
| Background butter | mg/kg fw | 0 | W |
| Background eggs | mg/kg fw | 0 | W |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | W |

* Volatile pollutant (vapour pressure > 0.1 Pa at 20°C)

2.7. STYRENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------------------|-----------------------------|--------------------------------------------------------------|
| CAS nr. | | 9003-53-6 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 104.51 | |
| Solubility | mg/l | 272 (25°C) | average |
| Vapour pressure* | Pa | 850 (25°C) | average |
| Henry coefficient | Pa m ³ /mol | 271 (25°C) | average |
| log Kow | g/g | 2.97 | Geometric mean |
| log Koc | dm ³ /kg | 2.86 | Geometric mean |
| Log Koa | g/g | calculated | W |
| BCF | | calculated | |
| Dpe | m ² /d | 2x10 ⁻⁶ | van den Berg (1995) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.6144 | average |
| Diffusion coefficient water (Dw) | m ² /d | 6.96x10 ⁻⁵ | average |
| Kp | [cm/h] | calculated | W |
| FA | - | 1 | W |
| ABS dermal soil/dust | - | 3.00x10 ⁻² | W US-EPA (1995, 2003b) |
| BTF beef | d/kg | calculated | |
| BTF mutton | d/kg | calculated | W |
| BTF liver | d/kg | calculated | |
| BTF kidney | d/kg | calculated | |
| BTF milk | d/kg | calculated | W |
| BTF soil – egg | d/kg | 0 | W values not searched for |
| BTF feed - egg | d/kg | 0 | W values not searched for |
| Carcinogenicity | | 2B | IARC (2002) |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 2.0x10 ⁻¹ | W US-EPA (1990) |
| TCL inhalation | mg/m ³ | 1.0x10 ⁻¹ | W Vermont (2007) |
| TDI dermal | mg/kg.d | 2.0x10 ⁻¹ | W = oral value |
| averaging period | | child, adolescent, lifelong | |
| Systemic effects non-threshold | | | |
| Oral slope factor | (mg/kg.d) ⁻¹ | 1.0x10 ⁻⁸ | W dummy value (considered non carcinogenic by oral exposure) |
| Inhalation unit risk | (mg/m ³) ⁻¹ | 5.7x10 ⁻⁴ | W New Jersey (2009) |
| Dermal slope factor | (mg/kg.d) ⁻¹ | 1.0x10 ⁻⁸ | W = oral value |
| Limit in outdoor air | mg/m ³ | - | W |
| Limit value in drinking water | mg/m ³ | - | W |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | W |
| Dietary background children | mg/kg.day | 0 | W |
| Background potatoes | mg/kg fw | 0 | W |
| Background root crops | mg/kg fw | 0 | W |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | W |
| Background fruit vegetables | mg/kg fw | 0 | W |
| Background cabbage | mg/kg fw | 0 | W |
| Background leafy vegetables | mg/kg fw | 0 | W |
| Background legume | mg/kg fw | 0 | W |
| Background beef | mg/kg fw | 0 | W |
| Background offal | mg/kg fw | 0 | W |
| Background milk | mg/kg fw | 0 | W |
| Background butter | mg/kg fw | 0 | W |
| Background eggs | mg/kg fw | 0 | W |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | W |

* Volatile pollutant (vapour pressure > 0.1 Pa at 20°C)

2.8. PHENOL (W)

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|-----------------------------|-----------------------------------------------------------------------|
| CAS nr. | | 108-95-2 | |
| Type | | organic | |
| Dissociating | | yes | |
| Acid dissociation | | Yes | |
| pKa | | 10 | Lijzen, et al. (2001) |
| Molecular weight | g/mol | 94.11 | |
| Solubility | mg/l | 82000 (15°C) | Verschueren (1996) |
| Vapour pressure | Pa | 46.3 (10°C) | Geometric mean |
| Henry coefficient | Pa m ³ /mol | 0.0761 (25°C) | Sander (1999) – Geometric mean |
| log Kow | g/g | 1.47 | Lijzen, et al. (2001) |
| log Koc | dm ³ /kg | 1.52 | Lijzen, et al. (2001) |
| Log Koa | g/g | calculated | |
| BCF | | calculated | |
| Dpe | m ² /d | 8.4x10 ⁻⁹ | Lijzen, et al. (2001) |
| Dpvc | m ² /d | 8.4x10 ⁻¹² | |
| Diffusion coefficient air (Da) | m ² /d | 0.7776 | CSOIL formula : Da (m ² /h) = 0,036*(76/M) ^{0,5} |
| Diffusion coefficient water (Dw) | m ² /d | 7.776x10 ⁻⁵ | CSOIL formula : Dw (m ² /h) = 3,6e-6*(76/M) ^{0,5} |
| Kp | [cm/h] | calculated | |
| FA | - | 1 | |
| ABS dermal soil/dust | - | 0.1 | |
| BTF beef | d/kg | calculated | |
| BTF mutton | d/kg | calculated | |
| BTF liver | d/kg | calculated | |
| BTF kidney | d/kg | calculated | |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | values not searched for |
| BTF feed - egg | d/kg | 0 | values not searched for |
| Carcinogenicity | | 3 D | IARC (1999b) US-EPA (2002) |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 4.0x10 ⁻² | Baars, et al. (2001) |
| TCL inhalation | mg/m ³ | 2.0x10 ⁻² | Baars, et al. (2001) |
| TDI dermal | mg/kg.d | 4.0x10 ⁻² | = oral value |
| averaging period | | child, adolescent, lifelong | |
| Limit in outdoor air | mg/m ³ | - | |
| Limit value in drinking water | mg/m ³ | - | |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | |

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Dietary background children | mg/kg.day | 0 | |
| Background potatoes | mg/kg fw | 0 | |
| Background root crops | mg/kg fw | 0 | |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | |
| Background fruit vegetables | mg/kg fw | 0 | |
| Background cabbage | mg/kg fw | 0 | |
| Background leafy vegetables | mg/kg fw | 0 | |
| Background legume | mg/kg fw | 0 | |
| Background beef | mg/kg fw | 0 | |
| Background offal | mg/kg fw | 0 | |
| Background milk | mg/kg fw | 0 | |
| Background butter | mg/kg fw | 0 | |
| Background eggs | mg/kg fw | 0 | |
| Background outdoor air | mg/m ³ | 0 | |
| Background indoor air | mg/m ³ | 0 | |
| Background drinking water | mg/m ³ | 0 | |

CHAPTER 3. SUBSTANCE DATA SHEETS TRIMETHYLBENZENES

Data on substances that do not derive from the former substance data sheets are indicated with **N**, accompanied with some explanation if appropriate. Detailed information on all new entries is given in Cornelis et al. (2013). Data on substances that differ from Flanders are indicated with **W**. Volatile pollutants (vapour pressure > 0.1Pa at 20°C) are highlighted in the document.

3.1. 1,2,3-TRIMETHYLBENZENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|------------------------------|------------------------------------------------|
| CAS nr. | | 526-73-8 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 120.2 | Geometric mean |
| Solubility | mg/l | 67.4 (25°C) | Geometric mean |
| Vapour pressure* | Pa | 225 (25°C) | Geometric mean |
| Henry coefficient | Pa m ³ /mol | 401 (25°C) | Calculated from S and P |
| log Kow ^{a)} | g/g | 3.6 (25°C) | Geometric mean |
| log Koc | dm ³ /kg | 2.836957 | Geometric mean |
| Log Koa | g/g | calculated | N |
| BCF | | calculated | |
| Dpe | m ² /d | 6.4x10 ⁻⁶ | van den Berg (1997) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.696 (25°C) | Calculated value |
| Diffusion coefficient water (Dw) | m ² /d | 6.86x10 ⁻⁵ (25°C) | Calculated value |
| Kp | [cm/h] | calculated | N |
| FA | - | 1 | N |
| ABS dermal soil/dust | - | 0.1 | N semi-volatile chemical (US-EPA, 2004) |
| BTF beef | d/kg | calculated | |
| BTF mutton | d/kg | calculated | N |
| BTF liver | d/kg | calculated | N |
| BTF kidney | d/kg | calculated | N |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | N values not searched for |
| BTF feed - egg | d/kg | 0 | N values not searched for |
| Carcinogenicity | | non-carcinogenic | |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 5x10 ⁻² | CEHT (2001) |
| TCL inhalation | mg/m ³ | 9.8x10 ⁻³ | Vermont (2007) |
| TDI dermal | mg/kg.d | 5x10 ⁻² | N = oral value |
| averaging period | | Child, adolescent, adult | |
| Limit in outdoor air | mg/m ³ | - | W |

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Limit value in drinking water | mg/m ³ | - | W |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | |
| Dietary background children | mg/kg.day | 0 | |
| Background potatoes | mg/kg fw | 0 | |
| Background root crops | mg/kg fw | 0 | |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | |
| Background fruit vegetables | mg/kg fw | 0 | |
| Background cabbage | mg/kg fw | 0 | |
| Background leafy vegetables | mg/kg fw | 0 | |
| Background legume | mg/kg fw | 0 | |
| Background beef | mg/kg fw | 0 | |
| Background offal | mg/kg fw | 0 | |
| Background milk | mg/kg fw | 0 | |
| Background butter | mg/kg fw | 0 | |
| Background eggs | mg/kg fw | 0 | |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | |

* Volatile pollutant (vapour pressure > 0.1Pa at 20°C)

a) The original substance data sheet from the background document for soil remediation values mentions $K_{ow} = 3.6$. The correct value is $\log K_{ow} = 3.6$. The latter value was used in the calculation of clean-up values and is also used in the Vlier-Humaan model.

3.2. 1,2,4-TRIMETHYLBENZENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|------------------------------|-----------------------------------------|
| CAS nr. | | 95-63-6 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 120.2 | |
| Solubility | mg/l | 62.2 (25°C) | Geometric mean |
| Vapour pressure* | Pa | 225 (25°C) | Geometric mean |
| Henry coefficient | Pa m ³ /mol | 631 (25°C) | Calculated from S and P |
| log Kow ^{a)} | g/g | 3.6 (25°C) | Geometric mean |
| log Koc | dm ³ /kg | 3.106871 | Geometric mean |
| Log Koa | g/g | calculated | N |
| BCF | | calculated | |
| Dpe | m ² /d | 6.4x10 ⁻⁶ | van den Berg (1997) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.6864 (25°C) | Calculated value |
| Diffusion coefficient water (Dw) | m ² /d | 6.86x10 ⁻⁵ (25°C) | Calculated value |
| Kp | [cm/h] | calculated | N |
| FA | - | 1 | N |
| ABS dermal soil/dust | - | 0.1 | N semi-volatile chemical (US-EPA, 2004) |
| BTF beef | d/kg | calculated | |
| BTF mutton | d/kg | calculated | N |
| BTF liver | d/kg | calculated | N |
| BTF kidney | d/kg | calculated | N |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | N values not searched for |
| BTF feed - egg | d/kg | 0 | N values not searched for |
| Carcinogenicity | | D | US-EPA (non-traceable) |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 0.05 | CEHT (2001) |
| TCL inhalation | mg/m ³ | 9.8x10 ⁻³ | Vermont (2007) |
| TDI dermal | mg/kg.d | 0.05 | N = oral value |
| averaging period | | child, adolescent, adult | |
| Limit in outdoor air | mg/m ³ | - | W |
| Limit value in drinking water | mg/m ³ | - | W |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | W |
| Dietary background children | mg/kg.day | 0 | W |
| Background potatoes | mg/kg fw | 0 | |

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Background root crops | mg/kg fw | 0 | |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | |
| Background fruit vegetables | mg/kg fw | 0 | |
| Background cabbage | mg/kg fw | 0 | |
| Background leafy vegetables | mg/kg fw | 0 | |
| Background legume | mg/kg fw | 0 | |
| Background beef | mg/kg fw | 0 | |
| Background offal | mg/kg fw | 0 | |
| Background milk | mg/kg fw | 0 | |
| Background butter | mg/kg fw | 0 | |
| Background eggs | mg/kg fw | 0 | |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | |

* Volatile pollutant (vapour pressure > 0.1 Pa at 20°C)

a) The original substance data sheet from the background document for soil remediation values mentions $K_{ow} = 3.6$. The correct value is $\log K_{ow} = 3.6$. The latter value was used in the calculation of clean-up values and is also used in the Vlier-Humaan model.

3.3. 1,3,5-TRIMETHYLBENZENE

| Parameter | Unit | Value | Source |
|----------------------------------|------------------------|------------------------------|-----------------------------------------|
| CAS nr. | | 108-67-8 | |
| Type | | organic | |
| Dissociating | | no | |
| Molecular weight | g/mol | 120.2 | |
| Solubility | mg/l | 67.6 (25°C) | Geometric mean |
| Vapour pressure* | Pa | 326 (25°C) | Geometric mean |
| Henry coefficient | Pa m ³ /mol | 774 (25°C) | Calculated from S and P |
| log Kow ^{a)} | g/g | 3.7 (25°C) | Geometric mean |
| log Koc | dm ³ /kg | 2.832509 | Geometric mean |
| Log Koa | g/g | calculated | N |
| BCF | | calculated | |
| Dpe | m ² /d | 6.4E-06 | van den Berg (1997) |
| Dpvc | m ² /d | calculated | |
| Diffusion coefficient air (Da) | m ² /d | 0.6864 (25°C) | calculated value |
| Diffusion coefficient water (Dw) | m ² /d | 6.86x10 ⁻⁵ (25°C) | calculated value |
| Kp | [cm/h] | calculated | N |
| FA | - | 1 | N |
| ABS dermal soil/dust | - | 0.1 | N semi-volatile chemical (US-EPA, 2004) |
| BTF beef | d/kg | calculated | |
| BTF mutton | d/kg | calculated | N |
| BTF liver | d/kg | calculated | N |
| BTF kidney | d/kg | calculated | N |
| BTF milk | d/kg | calculated | |
| BTF soil – egg | d/kg | 0 | N values not searched for |
| BTF feed - egg | d/kg | 0 | N values not searched for |
| Carcinogenicity | | D | US-EPA (cannot be traced back) |
| Systemic effects threshold | | | |
| TDI oral | mg/kg.d | 0.05 | CEHT (2001) |
| TCL inhalation | mg/m ³ | 9.8x10 ⁻³ | Vermont (2007) |
| TDI dermal | mg/kg.d | 0.05 | N = oral value |
| averaging period | | child, adolescent, adult | |
| Limit in outdoor air | mg/m ³ | - | W |
| Limit value in drinking water | mg/m ³ | - | W |
| Limit value in plants | mg/kg fw | - | |
| Limit value in meat | | | |
| Beef | mg/kg fw | - | |
| Mutton | mg/kg fw | - | |
| Liver | mg/kg fw | - | |
| Kidney | mg/kg fw | - | |
| Milk | mg/kg fw | - | |
| Butter | mg/kg fw | - | |
| Egg | mg/kg fw | - | |
| Dietary background adults | mg/kg day | 0 | |
| Dietary background children | mg/kg.day | 0 | |
| Background potatoes | mg/kg fw | 0 | |

| Parameter | Unit | Value | Source |
|------------------------------------------|-------------------|-------|--------|
| Background root crops | mg/kg fw | 0 | |
| Background bulbous plants (onion ...) | mg/kg fw | 0 | |
| Background fruit vegetables | mg/kg fw | 0 | |
| Background cabbage | mg/kg fw | 0 | |
| Background leafy vegetables | mg/kg fw | 0 | |
| Background legume | mg/kg fw | 0 | |
| Background beef | mg/kg fw | 0 | |
| Background offal | mg/kg fw | 0 | |
| Background milk | mg/kg fw | 0 | |
| Background butter | mg/kg fw | 0 | |
| Background eggs | mg/kg fw | 0 | |
| Background outdoor air | mg/m ³ | 0 | W |
| Background indoor air | mg/m ³ | 0 | W |
| Background drinking water | mg/m ³ | 0 | |

* Volatile pollutant (vapour pressure > 0.1Pa at 20°C)

a) The original substance data sheet from the background document for soil remediation values mentions $K_{ow} = 3.6$. The correct value is $\log K_{ow} = 3.6$. The latter value was used in the calculation of clean-up values and is also used in the Vlier-Humaan model.

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