\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

* 1. **Product identifier:**

**Substances**

**Substance name:**

**CAS No.:**

**Index No:**

**EC No:**

**REACH Registration No:**

***The transition period according to REACH Regulation, article 23 has not yet expired.***

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mixtures**

**Trade name / designation:**

**Other means of identification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses**

***In compliance with the conditions described in the annex to this safety data sheet.***

***Summarized overview of registered and identified uses and their respective exposure scenarios: pls. see annex to this SDS.***

**Uses advised against:**

***Do not use for injecting or spraying.***

**Reasons:**

**1.3 Details of the supplier of the safety data sheet:**

**Supplier:**

**Name**

**Address**

**Information contact**

**E-Mail (competent person)**

**Importer / Only Representative:**

**Name**

**Address**

**Information contact**

**E-Mail (competent person)**

**1.4 EMERGENCY TELEPHONE NUMBER:**

*Foot note (general hint):*

*Layout examples are given in the sections 2, 3, 8, 11 and 12. Of course other illustration alternatives and alternative substructures may be used in practice too.*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture:**

|  |  |  |
| --- | --- | --- |
| **Classification according to Regulation (EC) No 1272/2008 [CLP]** | **SCL and/or**  **M-factor** | **Classification procedure** |
| ***Flam. Liq. 2, H225***  ***Acute Tox. 3, H301***  ***Acute Tox. 3, H311***  ***Acute Tox. 3, H331***  ***STOT RE 1, H372***  ***Aquatic Acute 1, H400***  ***Aquatic Chronic 1, H410***  ***Repr. 1A, H360D*** | ***C ≥ 1 %:***  ***STOT RE 1, H372***  ***0,1 ≤ C < 1 %:***  ***STOT RE 2, H373***  ***M = 100***  ***M = 10***  ***C ≥ 3 %*** | ***On basis of test data***  ***Practical experience / human evidence***  ***Practical experience / human evidence***  ***Practical experience / human evidence***  ***On basis of test data***  ***On basis of test data***  ***On basis of test data***  ***Legal classification*** |

|  |  |  |
| --- | --- | --- |
| **~~Classification according to~~**  **~~67/548/EEC or 1999/45/EC~~** | **~~SCL and/or~~**  **~~M-factor~~** | **~~Classification procedure~~** |
| ***~~F; R11~~***  ***~~T; R23/24/25~~***  ***~~T; R48/23/24/25~~***  ***~~N R50/53~~***  ***~~Repr. Cat. 1, R61~~*** | ***~~C ≥ 0,5 %:~~***  ***~~T; R23/24/25~~***  ***~~0,1 ≤ C < 0,5 %:~~***  ***~~Xn; R20/21/22~~***  ***~~C ≥ 1 %:~~***  ***~~T; R48/23/24/25~~***  ***~~0,1 ≤ C < 1 %:~~***  ***~~Xn; R48/20/21/22~~***  ***~~M = 100~~***  ***~~C ≥ 3 %~~*** | ***~~On basis of test data~~***  ***~~Practical experience / human evidence~~***  ***~~On basis of test data~~***  ***~~On basis of test data~~***  ***~~Legal classification~~*** |

**Additional information:**

***Full text of H- and EUH-phrases: see SECTION 16.***

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. **Label elements**

**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**

**Product identifier:**

**Substances:)**

Index No

**Authorisation No**

**Mixtures:**

***MethaSol***

**Hazard components for labeling:**

***Substance 1***

**Authorisation No**

**Hazard pictograms**

**   **

**GHS02 GHS06 GHS08 GHS09**

**Signal word:**

Danger

**Hazard statements:**

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure

H360D May damage the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P309+P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or

doctor/physician.

P301+P330 IF SWALLOWED: Rinse mouth.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Supplemental Hazard information (EU):**

**Special rules for supplemental label elements for certain mixtures:**

**Additional labelling:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2.3 Other hazards**

Adverse physicochemical effects:

Adverse human health effects and symptoms:

Adverse environmental effects:

Other adverse hazards:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 3. Composition/information on ingredients**

* 1. **Substances**

**Substance name:**

**INDEX No:**

**EC No:**

**REACH Registration No:**

**CAS No:**

**Purity:**

**Synonymes:**

**Stabilisers:**

**Hazard impurities:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ALTERNATIVE for mixtures**

**3.1 Mixtures**

**Description of the mixture:**

***Aqueous solution of ABC.***

**Hazardous ingredients**

***EXAMPLE***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Substance**  **name** | **CAS No.** | **INDEX**  **No.** | **EC No.** | **Concentration** | **Classification according**  **Regulation (EC) No. 1272 [CLP]** | **SCL and/or**  **M-factor** |
| ***ABC*** | ***123-45-6*** |  | ***123-456-7*** | ***50 %*** | ***Flam. Liq. 2, H225***  ***Acute Tox. 3, H301***  ***Acute Tox. 3, H311***  ***Acute Tox. 3, H331***  ***STOT RE 1, H372***  ***Aquatic Acute 1, H400***  ***Aquatic Chronic 1, H410***  ***Repr. 1A, H360D*** | ***C ≥ 1 %:***  ***STOT RE 1, H372***  ***0,1 ≤ C < 1 %:***  ***STOT RE 2, H373***  ***M = 100***  ***M = 10***  ***C ≥ 3 %*** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **~~Substance~~**  **~~name~~** | **~~CAS No.~~** | **~~INDEX~~**  **~~No.~~** | **~~EC No.~~** | **~~Concen-tration~~** | **~~Classification according~~**  **~~67/548/EEC or 1999/45/EC~~** | **~~SCL and/or~~**  **~~M-factor~~** |
| ***~~ABC~~*** | ***~~123-45-6~~*** |  | ***~~123-456-7~~*** | ***~~50 %~~*** | ***~~F; R11~~***  ***~~T; R23/24/25~~***  ***~~T; R48/23/24/25~~***  ***~~N R50/53~~***  ***~~Repr. Cat. 1, R61~~*** | ***~~C ≥ 0,5 %:~~***  ***~~T; R23/24/25~~***  ***~~0,1 ≤ C < 0,5 %:~~***  ***~~Xn; R20/21/22~~***  ***~~C ≥ 1 %:~~***  ***~~T; R48/23/24/25~~***  ***~~0,1 ≤ C < 1 %:~~***  ***~~Xn; R48/20/21/22~~***  ***~~M = 100~~***  ***~~C ≥ 3 %~~*** |

|  |  |
| --- | --- |
| **Substance name** | **REACH No.** |
| ***ABC*** | ***01-XXXXXXXXXX-YY-ZZZZ*** |

**Additional information:**

***Full text of H- and EUH-phrases: see SECTION 16.***

***This mixture does not contain further substances fulfilling the criteria of hazard class "acute toxicity" according to CLP regulation.***

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**General informations:**

**Following inhalation:**

**Following skin contact:**

**Following eye contact:**

**Following ingestion:**

**Self-protection of the first aider:**

**4.2 Most important symptoms and effects, both acute and delayed**

Symptoms:

Effects:

* 1. Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

Special treatment:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 5: Firefighting measures**

**5.1** **Extinguishing media:**  
Suitable extinguishing media:

Unsuitable extinguishing media:

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

5.3 Advice for fire-fighters

**Additional information:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

Protective equipment:

Emergency procedures:

**For emergency responders**

Personal protective equipment:

* 1. **Environmental precautions:**
  2. **Methods and material for containment and cleaning up**

**For containment:**

**For cleaning up:**

**Other information:**

**6.4 Reference to other sections**

**Additional information:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

**Protective measures:**

Advice on safe handling

Fire preventions:

Aerosol and dust generation preventions:

Environmental precautions:

**Advice on general occupational hygiene**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**7.2 Conditions for safe storage, including any incompatibilities**

**Technical measures and storage conditions:**

**Packaging materials:**

**Requirements for storage rooms and vessels:**

**Hints on storage assembly:**

Storage class:

Materials to avoid:

**Further information on storage conditions:**

**7.3 Specific end uses:**

Recommendations:

Specific end uses:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 8: Exposure controls/personal protection**

***Preventive industrial medical examinations are to be carried out.***

* 1. **Control parameters**
     1. **Occupational exposure limits:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Limit value type (country of origin)** | **Substance**  **name** | **EC-No.** | **CAS-No.** | **Occupational exposure limit value** | | **Monitoring**  **and observation processes** | **Peak limitation** | **Source** |
| Long term | Short term |  |  |  |
| ***AGW (DE)*** |  |  |  |  |  |  |  | ***TRGS 900*** |
| ***OEL (EU)*** |  |  |  |  |  |  |  |  |

**8.1.2 Biological limit values:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Limit value type (country of origin)** | **Substance**  **name** | **EC-No.** | **CAS-No.** | **Limit**  **Value** | **Parameter** | **Test**  **material** | **Test**  **date** | **Source** |
| ***BGW (DE)*** | ***2-Propanol*** |  | ***67-63-0*** | 50 mg/l  50 mg/l | ***Acetone*** | ***Urine (U)***  ***Whole Blood (B)*** | ***b*** | ***TRGS 903*** |

**8.1.3 Exposure limits at intended use:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8.1.4 DNEL/PNEC-values:**

**Substance name:**

**DNEL Worker:**

|  |  |  |  |
| --- | --- | --- | --- |
| **DNEL type** | **DNEL value** | **Assessment factor** | **Remark** |
| DNEL short-term oral (acute) |  |  | ***Not applicable*** |
| DNEL long-term oral (repeated) |  |  | ***Not applicable*** |
| DNEL acute dermal, short-term (local) |  |  |  |
| DNEL acute dermal, short-term (systemic) |  |  |  |
| DNEL long-term dermal (local) |  |  |  |
| DNEL long-term dermal (systemic) |  |  |  |
| DNEL acute inhalative (local) |  |  |  |
| DNEL acute inhalative (systemic) |  |  |  |
| DNEL long-term inhalative (local) |  |  |  |
| DNEL long-term inhalative (systemic) |  |  |  |

**DNEL Consumer:**

**…**

**PNEC**

|  |  |  |  |
| --- | --- | --- | --- |
| **PNEC type** | **PNEC value** | **Assessment factor** | **Remark** |
| PNEC aquatic, freshwater |  |  |  |
| PNEC aquatic, marine water |  |  |  |
| PNEC aquatic, intermittent release |  |  |  |
| PNEC sediment, freshwater |  |  |  |
| PNEC sediment, marine water |  |  |  |
| PNEC soil |  |  |  |
| PNEC sewage treatment plant |  |  |  |
| PNEC air |  |  |  |
| PNEC secondary poisoning |  |  |  |

**8.1.5 Risk management measures according to used control banding approach**

Control banding for chemicals according to the ILO CHEMICAL CONTROL TOOLKIT (ICCT)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task | Hazard band | Scale of use | Ability to become airborne | Control approach | **Control guidance sheet** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8.2 Exposure controls**

**8.2.1 Appropriate engineering controls:**

**8.2.2 Personal protective equipment:**

**Eye / Face protection:**

Suitable eye protection

Other eye protection measures

**Skin protection:**

Hand protection:

Body protection:

Other skin protection measures:

**Respiratory protection:**

**Thermal hazards**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8.2.3 Environmental exposure controls:**

**Consumer exposure control**

Measures related to consumer uses of the substance (as such or in mixtures):

Measures related to the service life of the substance in articles:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 9. Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Appearance**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Value** | **Concentration** | **Method** | **Temperature** | **Pressure** | **Remark** |
| **pH** |  |  |  |  |  |  |
| **Melting point/freezing point** |  |  |  |  |  |  |
| **Initial boiling point/boiling range** |  |  |  |  |  |  |
| **Flash point** |  |  |  |  |  |  |
| **Evaporation rate** |  |  |  |  |  |  |
| **Flammability (solid, gas)** |  |  |  |  |  |  |
| **Upper/lower flammability or explosive limits** |  |  |  |  |  |  |
| **Upper explosive limits** |  |  |  |  |  |  |
| **Lower explosive limits** |  |  |  |  |  |  |
| **Vapour pressure** |  |  |  |  |  |  |
| **Vapour density** |  |  |  |  |  |  |
| **Relative density** |  |  |  |  |  |  |
| **Solubility(ies)** |  |  |  |  |  |  |
| **Partition coefficient:**  **n-octanol/water** |  |  |  |  |  |  |
| **Auto-ignition temperature** |  |  |  |  |  |  |
| **Decomposition temperature** |  |  |  |  |  |  |
| **Viscosity** |  |  |  |  |  |  |
| **Viscosity, dynamic** |  |  |  |  |  |  |
| **Viscosity, cinematic** |  |  |  |  |  |  |
| **Explosive properties** |  |  |  |  |  |  |
| **Oxidising properties** |  |  |  |  |  |  |

**Physical state: Colour: Odour: Odour threshold:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**9.2 Other information:**

**Physical hazards:**

If data for any of these hazard classes is not available, these hazard classes shall still be listed in the safety data sheet with a statement that data is not available or not applicable.

**Explosives**

**Justification for data waiving:**

**Screening procedures**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| Exothermic decomposition energy |  |  |  |
| Decomposition temperature |  |  |  |
| Oxygen balance |  |  |  |

**Safety characteristics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| *Thermal sensitivity: Number of fragments* |  | *Regulation (EC) No 440/2008, Annex, A.14* |  |
| *Sensitiveness to impact :Impact energy* |  |  |
| *Sensitiveness to friction: Friction load* |  |  |
| *Limiting impact energy* |  | *UN Test series 4* |  |
| *Fragmented length* |  |  |
| *Limiting diameter* |  |  |
| *Time for a pressure rise from 690 to 2070 kPa* |  |  |
| *Limiting impact energy* |  |  |
| *Limiting load* |  |  |

**Assessment / Classification:**

**Flammable gases**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Value** | **Temperature** | **Pressure** | **Method** | **Remark** |
| Lower explosion limit |  |  |  |  |  |
| Upper explosion limit |  |  |  |  |  |

**Assessment / Classification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Flammable aerosols**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Value** | **Result** | **Method** | **Remark** |
| Content of flammable components |  |  |  |  |
| Chemical heat of combustion |  |  |  |  |
| Ignition distance |  |  |  | ***Testing is not required for foam aerosols.*** |
| Time equivalent |  |  |  |
| Deflagration density |  |  |  |
| Maximum flame height |  |  |  | ***Testing is not required for spray aerosols.*** |
| Flame duration |  |  |  |  |

**Assessment / Classification:**

**Oxidising gases**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| Oxidising Power (OP) |  |  |  |
| Xi Content of the oxidising component |  |  |  |
| Coefficient of oxygen equivalency |  |  |  |

**Assessment / Classification:**

**Gases under pressure**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Result** | **Remark** |
| Molecular weight |  |  |  |
| Vapour pressure at 50 °C |  |  |  |
| Vapour pressure at 20 °C |  |  |  |
| Critical temperature |  |  |  |
| Critical pressure |  |  |  |
| Critical density |  |  |  |

**Assessment / Classification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Flammable liquids**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| Flash point |  |  |  |
| Sustaining combustion |  |  |  |

**Assessment / Classification:**

**Flammable solids**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| Burning rate |  |  |  |
| Burning rate with wetted zone |  |  |  |
| Moisture content |  |  |  |

**Assessment / Classification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Self-reactive substances and mixtures**

**Justification for data waiving:**

**Screening procedures**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| Exothermic decomposition energy |  |  |  |
| Decomposition temperature |  |  |  |

**Safety characteristics:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Value** | **Result** | **Method** | **Remark** |
| Decomposition energy |  |  |  |  |
| Effect of heating under confinement |  |  |  |  |
| Self-accelerating decomposition temperature (SADT) |  |  |  |  |
| Explosive power |  |  |  |  |
| Detonation velocity |  |  |  |  |
| Fragmented length |  |  | ***UN Test series A*** |  |

**Assessment / Classification:**

**Pyrophoric liquids**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Value** | **Result** | **Method** | **Remark** |
| Ignition time on contact with air |  | ***No ignition within 5 minutes.*** | ***Regulation (EC) No. 440/2008, Annex, A.13*** |  |
| Effect on filter paper |  |  |  |  |

**Assessment / Classification:**

**Pyrophoric solids**

**Justification for data waiving:**

**Safety characteristic:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Result / Evaluation** | **Method** | **Remark** |
| Ignition time on contact with air (s) |  |  |  |

**Assessment / Classification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Self-heating substances and mixtures**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Value** | **Result** | **Method** | **Remark** |
| Induction time |  |  |  |  |
| Max. temperature rised |  |  |  |  |

**Assessment / Classification:**

**Substances or mixtures which, in contact with water emit flammable gases**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| step of the test procedure |  |  |  |
| Maximum rate of evolution of flammable gas |  |  |  |
| Chemical identity of the evolved gas |  |  |  |

**Assessment / Classification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Oxidising liquids**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| Preliminary test |  |  |  |
| Mean pressure rise time of test mixture |  |  |  |
| Mean pressure rise time of reference mixture |  |  |  |
| Test with an inert substance |  |  |  |

**Assessment / Classification:**

**Oxidising solids**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **Method** | **Remark** |
| Preliminary test |  |  |  |
| Mean burning time of test mixture |  |  |  |
| Mean burning time of reference mixture |  |  |  |

**Assessment / Classification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Organic peroxides**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Value** | **Result** | **Method** | **Remark** |
|  |  |  |  |  |
| Available oxygen content |  |  |  |  |
| Percentage of hydrogen peroxide |  |  |  |  |
| Fragmented length |  |  | ***UN Test series A*** |  |
| Detonation velocity |  |  |  |

**Assessment / Classification:**

**Metal corrosion**

**Justification for data waiving:**

**Safety characteristics:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Value** | **Temperature** | **Test duration** | **Method** | **Remark** |
| Corrosion rate (mm steel/year) |  |  |  |  |  |
| Corrosion rate (mm aluminium/year) |  |  |  |  |  |
| Intrusion depth |  |  |  |  |  |

**Assessment / Classification:**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

**10.2 Chemical stability**

**10.3 Possibility of hazardous reactions**

**10.4 Conditions to avoid:**

**10.5 Incompatible materials:**

**10.6 Hazardous decomposition products:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 11: Toxicological information**

**Toxicokinetics, metabolism and distribution**

**11.1 Information on toxicological effects**

***Ithalic*** *marked sentences are used as content examples*

The entry ***Substance*** illustrating the single ingredients/substances of mixtures (use only if appropriate, e.g. for multi component mixtures).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**11.1.1 Substances**

**Acute toxicity**

**Practical experience / human evidence:**

**Animal data:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose /**  **-concentration** | **Value** | **Species** | **Method** | **Symptoms / delayed effects** | **Remark** |
| ***Substance 1*** | | | | | | |
| Acute oral toxicity | ***LD50*** | ***1980 mg/kg bw*** | ***Rat*** | ***OECD 401*** |  |  |
| Acute dermal toxicity | ***ATE:*** | ***500 mg/kg bw*** |  |  |  | ***converted Acute***  ***Toxicity point***  ***Estimate*** |
| Acute inhalative toxicity (gas) |  |  |  |  |  |  |
| Acute inhalative toxicity (vapour) | ***LC50*** | ***> 20 mg/l/4h*** | ***Rat*** | ***Regulation (EC) No. 440/2008, Annex, B.2*** |  |  |
| Acute inhalative toxicity (dust/mist) |  |  |  |  |  |  |
| ***Substance 2*** | | | | | | |

**Other information:**

**Assessment / Classification:**

**Skin corrosion/irritation**

**Practical experience / human evidence:**

**Acid-/Alkali reserve (buffer capacity for mixtures with extreme pH values)**

Acidic reserve [g NaOH/100 g product]:

Alkaline reserve [g H2SO4/100 g product]:

**Animal data:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Species** | **Method** | **Result /Evaluation** | **Remark** |
| ***Substance 1*** | ***Rabbit*** | ***OECD 404*** | ***Erythrema***  ***Scores: 2.3*** | ***corrosive*** |

**In-vitro skin test:**

**Other information:**

**Assessment / Classification: *Causes skin corrosion***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Eye damage/irritation**

**Practical experience / human evidence:**

**Animal data:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Species** | **Method** | **Result / Evaluation** | **Remark** |
| ***Substance 1*** | ***Albino rabbit*** | ***OECD 405*** | ***Conjunctival redness***  ***Scores: 2,2***  ***Chemosis***  ***Scores: 1,5***  ***Corneal opacity***  ***Scores: 1,7*** |  |

**Other information:**

**Assessment / Classification: *Causes eye irritation***

**Sensitisation to the respiratory tract/skin**

**Sensitisation to the respiratory tract**

**Practical experience / human evidence:**

**Other information:**

**Assessment / Classification: *Not classifiable due to data lacking***

**Skin sensitisation**

**Practical experience / human evidence:**

**Animal data:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Value** | **Species** | **Method** | **Result /**  **Evaluation** | **Remark** |
| ***Substance 1*** |  |  | ***Guinea pig*** | ***OECD 406*** | ***not sensitising*** |  |

**Other information:**

**Assessment / Classification: *Based on available data, the classification criteria are not met.***

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**

**Germ cell mutagenicity**

In vitro mutagenicity/genotoxicity

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Cell type/**  **Organism** | **Genetic Endpoint** | **Method** | **Result /**  **Evaluation** | **Remark** |
| ***Substance 1*** | ***...mg/plate*** | ***bacteria/***  ***S. typhi-***  ***murium*** | ***point-***  ***mutations*** | ***OECD 471*** | ***positive*** |  |

In vivo mutagenicity/genotoxicity

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Cell type/**  **Organism** | **Genetic Endpopint** | **Method** | **Result/**  **Evaluation** | **Remark** |
| ***Substance 1*** | ***500 mg/kg bw*** | ***Bone marrow / mouse*** | ***chromosome aberra-tion*** | ***OECD 475*** |  |  |

**Other information:**

**Assessment / Classification:**

**Carcinogenicity**

**Practical experience / human evidence:**

**Animal data:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concen-**  **tration** | **Value** | **Exposure**  **route** | **Exposure**  **duration** | **Species** | **Method** | **Result /**  **Evaluation** | **Remark** |
| ***Substance 1*** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**Other information:**

**Assessment / Classification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Reproductive toxicity**

**Practical experience / human evidence:**

**Animal data**

Adverse effects on sexual function and fertility:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concen-**  **tration** | **Value** | **Exposure**  **route** | **Exposure**  **duration** | **Species** | **Method** | **Result /**  **Evaluation** | **Remark** |
| ***Substance 1*** | ***NOAEL*** | ***1000 mg/kg/d*** | ***oral*** | ***28 d*** | ***Rat*** | ***OECD 421*** | ***negative*** |  |

Adverse effects on developmental toxicity:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concen-**  **tration** | **Value** | **Exposure**  **route** | **Exposure**  **duration** | **Species** | **Method** | **Result /**  **Evaluation** | **Remark** |
| ***Substance 1*** |  |  |  |  |  |  |  |  |

Effects on or via lactation:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concen-**  **tration** | **Value** | **Exposure**  **route** | **Exposure**  **duration** | **Species** | **Method** | **Result**  **Evaluation** | **Remark** | |
| ***Substance 1*** |  |  |  |  |  |  |  |  |

**Other information:**

**Assessment / Classification:**

**Overall assessment on CMR properties:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Specific target organ toxicity (single exposure)**

**STOT SE 1 and 2**

**Practical experience / human evidence:**

**Animal data:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concen-**  **tration** | **Value** | **Exposure**  **duration** | **Species** | **Method** | **Specific**  **effects** | **Organs**  **affected** | **Remark** |
| ***Substance 1*** | | | | | | | | |
| Oral specific target organ toxicity (single exposure) |  |  |  |  |  |  |  |  |
| Dermal specific target organ toxicity (single exposure) |  |  |  |  |  |  |  |  |
| Inhalative specific target organ toxicity (single exposure) |  |  |  |  |  |  |  | ***vapour*** |

**Other information:**

**Assessment / Classification:**

**STOT SE 3**

**Irritation to respiratory tract:**

**Practical experience / human evidence:**

**Other information:**

**Assessment / Classification:**

**Narcotic effects**

**Practical experience / human evidence:**

**Other information:**

**Assessment / Classification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Specific target organ toxicity (repeated exposure)**

**STOT RE 1 and 2**

**Practical experience / human evidence:**

**Animal data:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concen-**  **tration** | **Value** | **Exposure**  **duration** | **Species** | **Method** | **Specific**  **effects** | **Organs**  **affected** | **Remark** |
| ***Substance 1*** | | | | | | | | |
| Oral specific target organ toxicity  (repeated exposure) | ***NOAEL*** | ***1000 mg/kg/d*** | ***oral*** | ***90 d*** | ***rat*** | ***OECD 408*** | ***none*** |  |
| Dermal specific target organ toxicity  (repeated exposure) |  |  |  |  |  |  |  |  |
| Inhalative specific target  organ toxicity  (repeated exposure) |  |  |  |  |  |  |  |  |

**Other information:**

**Assessment / Classification: *Based on available data, the classification criteria are not met.***

**Aspiration hazard**

**Practical experience / human evidence: *No data available.***

**Experimental data: *viscosity data: see SECTION 9.***

**Assessment / Classification: *Based on available data, the classification criteria are not met.***

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Symptoms related to the physical, chemical and toxicological characteristics:**

In case of ingestion

In case of skin contact:   
In case of inhalation:   
In case of eye contact:

**11.1.2 Mixtures**

***Substance 1***

(a) acute toxicity;

(b) irritation;

(c) corrosivity;

(d) sensitisation;

(e) repeated dose toxicity;

(f) carcinogenicity;

(g) mutagenicity;

(h) toxicity for reproduction.

**Other information:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 12:** **Ecological information**

**12.1 Toxicity:**

**Aquatic toxicity**   
Acute (short-term) fish toxicity

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Value** | **Test duration** | **Species** | **Result/**  **Evaluation** | **Method** | **Remark** |
| ***Substance 1*** | ***LC50*** | ***XX mg/l*** | ***96 h*** | ***Zebra fish*** |  | ***OECD 203*** | ***semistatic*** |

C

Chronic (long-term) fish toxicity

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Value** | **Test duration** | **Species** | **Result/**  **Evaluation** | **Method** | **Remark** |
| ***Substance 1*** | ***NOEC*** | ***XX mg/l*** | ***28 d*** | ***Rainbow trout*** |  | ***OECD 201*** | ***Inhibition of growth rate*** |

Acute (short-term) toxicity to crustacea

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Value** | **Test duration** | **Species** | **Result/**  **Evaluation** | **Method** | **Remark** |
| ***Substance 1*** | ***EC50*** | ***XX mg/l*** | ***48 h*** | ***Daphnia magna*** |  | ***OECD 202*** | ***Immobilisation*** |

Chronic (long-term) toxicity to crustacea

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Value** | **Test duration** | **Species** | **Result/**  **Evaluation** | **Method** | **Remark** |
| ***Substance 1*** | ***NOEC*** | ***XX mg/l*** | ***28 d*** | ***Daphnia magna*** |  | ***OECD 211*** | ***Reproduction test*** |

Acute (short-term) toxicity to algae and cyanobacteria

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Value** | **Test duration** | **Species** | **Result/**  **Evaluation** | **Method** | **Remark** |
| ***Substance 1*** | ***EC50*** | ***XX mg/l*** | ***72 h*** | ***Scenedesmus subspicatus*** |  | ***OECD 201*** | ***Inhibition of growth rate*** |

Toxicity to other aquatic plants / organisms

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Value** | **Test duration** | **Species** | **Result/**  **Evaluation** | **Method** | **Remark** |
| ***Substance 1*** | ***EC50*** | ***XX mg/l*** | ***7 d*** | ***Lemna minor*** |  | ***OECD 221*** | ***Inhibition of growth rate*** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Effect dose/**  **-concentration** | **Value** | **Test duration** | **Species** | **Result/**  **Evaluation** | **Method** | **Remark** |
| ***Substance 1*** | ***EC20*** | ***XX mg/l*** | ***30 min*** | ***Activated sludge (ind.)*** |  | ***OECD 209*** |  |

Toxicity to microorganisms

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Sediment toxicity**

**Terrestrial toxicity:**

**Toxicity to soil macroorganisms except arthropods**

**Toxicity to terrestrial arthropods**

**Toxicity to terrestrial plants**

**Toxicity to birds**

**Assessment / Classification:**

***Substance 1:***

***Harmful to aquatic organisms.***

**12.2 Persistence and degradability**

**Biodegradation:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Inoculum** | **Parameter** | **Degradation**  **rate** | **Method** | **Remark** |
| ***Substance 1*** | ***Activated sludge (ind.)*** | ***BSB des ThSB (28d)*** | ***80-90%*** | ***OECD 301 F*** | ***--*** |
| ***Substance 2*** | ... |  |  |  |  |

**Abiotic Degradation:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Test type** | **t 1/2** | **Temperature** | **pH-value** | **Method** | **Remark** |
| ***Substance 1*** | ***Hydrolysis*** | ***0,59 h*** | ***20°C*** | ***4*** | ***OECD 111*** | ***--*** |
| ***Substance 2*** | ... |  |  |  |  |  |

**Assessment / Classification:**

***Substance 1***

***Readily biodegradable (according to OECD criteria).***

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**12.3 Bioaccumulative potential**

**Bioconcentration factor (BCF)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Species** | **Result** | **Method** | **Remark** |
| ***Substance 1*** | ***Pimephales promelas*** | ***123*** | ***OECD 305*** | ***by analogy*** |

**Assessment / Classification:**

***Substance 1***

***Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.***

**12.4 Mobility in soil**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Distribution** | **Transport**  **type** | **Parameter** | **Result** | **Method** | **Remark** |
| ***Substance 1*** | ***Water – Air*** | ***Volatility*** | ***Henrys Law Constant*** | ***680***  ***Pa m3 / mol*** | ***estimated*** | ***--*** |
| ***Substance 2*** | ***Sediment - Water*** | ***Adsorption*** | ***Log KOC*** | ***0,1*** | ***estimated*** | ***--*** |

**Assessment / Classification:**

***Substance 1***

***Substance 2***

**12.5 Results of PBT and vPvB assessment**

***Substance 1***

***This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.***

**12.6 Other adverse effects:**

***Substance 1***

***The substance has a very low global warming potential.***

***The substance has no ozone depleting potential.***

**Additional ecotoxicological information**

***Substance 1***

***The statement is derived from products of similar structure or composition.***

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product / Packaging disposal:**

**Waste codes / waste designations according to EWC / AVV:**

**Packaging:**

**Waste treatment options:**

**Other disposal recommendations:**

**Additional information:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 14: Transport information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Land transport (ADR/RID)** | **Inland waterway transport (ADN)** | **Sea transport (IMDG)** | **Air transport (ICAO-TI / IATA-DGR)** |
| **14.1 UN No.** |  |  |  |  |
| **14.2 UN Proper shipping name** |  |  |  |  |
| **14.3 Transport hazard class(es)** |  |  |  |  |
| **Hazard label(s)** |  |  |  |  |
| **14.4 Packing group** |  |  |  |  |
| **14.5 Envirommental hazards** |  |  |  |  |

**14.6 Special precautions for user**

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**Additional information**

**All transport carriers**

**Land transport (ADR/RID)**

Limited quantity:

Special provisions:

Tunnel restriction code:

Classification code:

Transport category:

Hazard identification number (Kemler No.):

Remark:

**Inland waterway transport (ADN)**

Limited quantity:

Special provisions:

Category:

Remark:

**Sea transport (IMDG)**

Limited quantity:

Special provisions:

Marine pollutant:

Segregation group:

Remark:

**Air transport (ICAO-TI / IATA-DGR)**

Limited quantity:

Special provisions:

Remark:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SECTION 15: Regulatory information**

**15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture

**15.1.1 EU regulations**

**Authorisations and/or restrictions on use:**

Authorisations:

Restrictions on use:

**Other EU regulations:**

**Directive 2010/75/EC on industrial emissions**

CHAPTER III: SPECIAL PROVISIONS FOR COMBUSTION PLANTS

Categories of fuel: ***Liquid fuels***

Bemerkung: ***The fuel is no subject of use restrictions according to Directive 2010/75/EC on industrial emissions (article 34(4)).***

CHAPTER V: SPECIAL PROVISIONS FOR INSTALLATIONS AND ACTIVITIES USING ORGANIC SOLVENTS

Volatile organic compounds (VOC) content in percent by weight:

|  |  |  |  |
| --- | --- | --- | --- |
| Value | Temperature | Method | Remark |
| ***33 +/-1,5*** | ***20 °C*** |  |  |
| ***37,5 +/-1,7*** | ***140 °C*** |  | ***Baking temperature of the coating*** |

Ingredients of the mixture which are CMR-VOC or halogenated VOC:

| Stoffname | CAS-Nr. | INDEX-NR. | EG-Nr. |
| --- | --- | --- | --- |
| ***ABC*** | ***123-45-6*** | ***123-456-78-9*** | ***123-456-7*** |
| ***DEF*** | ***234-56-7*** | ***345-678-90-1*** | ***456-789-0*** |

**Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).**

**Directive 2004/42/CE on the limitation of emissions of volatile organic compounds**

**Regulation (EC) No. 842/2006 on certain fluorinated greenhouse gases.**

**Regulation (EC) No 1005/2009 on substances that deplete the ozone layer**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**15.1.2 National regulations**

* 1. **Chemical Safety Assessment:**

***For this substance a chemical safety assessment is not required.***

**SECTION 16: Other information**

**16.1 Indication of changes**

* 1. **Abbreviations and acronyms:**
  2. **Key literature references and sources for data**
  3. **Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]:**

**Classification according to Classification procedure**

**Regulation (EC) Nr. 1207/2009**

**-----------------------------------------------------------------------------------------**

Flam. Liq. 2, H225 On basis of test data

Acute Tox. 3, H301 Calculation method

Acute Tox. 3, H311 Calculation method

Acute Tox. 3, H331 Calculation method

STOT SE 1, H370 Calculation method

* 1. **Relevant R-, H- and EUH-phrases (number and full text):**
  2. **Training advice:**

**16.7 Further information:**

**Annex to extended safety data sheet (eSDS)**