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

1.1 Product identifier
Lithofin Basic Cleaner

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses
Mixture washing and cleaning products, alkaline

1.3 Supplier (manufacturer/importer/only representative/downstream user/distributor)
Contact:

- Supplier: Lithofin AG
- Street: Heinrich-Otto-Str. 36
- Postal code/city: 73240 Wendlingen
- Telephone: +49 (0)7024 9403-0
- Telefax: +49 (0)7024 9403-40
- Contact: Technical Department
- E-mail: info@lithofin.de

Emergency telephone number:
+49 (0)7024 9403-0
(Only available during office hours)

1.4 Emergency telephone number
see section 1.3

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [CLP]

- Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.
- Met. Corr. 1 ; H290 - Corrosive to metals : Category 1 ; May be corrosive to metals.

Additional information
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Remark
Full text of H- and EUH-phrases: see section 16.

2.2 Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

Corrosion (GHS05)
Signal word
Danger

Hazard components for labelling
Propylheptanolethoxilate ; CAS No. : 160875-66-1
Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl) dimethyl, ethoxylated, chlorides ; CAS No. : 1554325-20-0

Hazard statements
H290 May be corrosive to metals.
H318 Causes serious eye damage.
Precautionary statements
P102 Keep out of reach of children.
P234 Keep only in original packaging.
P280 Wear eye protection/face protection.
P337+P313 If eye irritation persists: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container in accordance with local and national regulations.

Other labelling

2.3 Other hazards
Adverse human health effects and symptoms
Due to its pH value (see section 9), irritation of the skin and eyes cannot be ruled out.

2.4 Additional information
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Hazardous ingredients
BUTYL CELLOSOLVE ; REACH registration No. : 01-2119475108-36-xxxx ; EC No. : 203-905-0; CAS No. : 111-76-2
Weight fraction : ≥ 1 - < 5 %
Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319
(2-METHOXYMETHYLETHOXY)PROPANOL ; REACH registration No. : 01-2119450011-60-xxxx ; EC No. : 252-104-2; CAS No. : 34590-94-8
Weight fraction : ≥ 1 - < 5 %
Classification 1272/2008 [CLP] : Substance with a common (EC) occupational exposure limit value.
Propylheptanolethoxilate ; EC No. : 605-233-7; CAS No. : 160875-66-1
Weight fraction : ≥ 1 - < 3 %
Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Acute Tox. 4 ; H302
Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl) dimethyl, ethoxylated, chlorides ; EC No. : 810-152-7; CAS No. : 1554325-20-0
Weight fraction : ≥ 1 - < 3 %
Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315

Additional information
All ingredients of this mixture are (pre)registered according to REACH regulation.
Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information
When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious place in recovery position and seek medical advice.

Following inhalation
Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact
After contact with skin, wash immediately with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. Do not wash with: Cleaning agent, acidic Cleaning agent, alkaline Solvents/Thinner

After eye contact
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart
and consult an ophthalmologist. Protect uninjured eye.

**After ingestion**
Call a physician immediately. Keep at rest. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting.

**Self-protection of the first aider**
First aider: Pay attention to self-protection!

4.2 **Most important symptoms and effects, both acute and delayed**
No information available.

4.3 **Indication of any immediate medical attention and special treatment needed**

- **Notes for the doctor**
  - Treat symptomatically.
- **Special treatment**
  - First Aid, decontamination, treatment of symptoms.

**SECTION 5: Firefighting measures**

5.1 **Extinguishing media**
- **Suitable extinguishing media**
  - Water spray ABC-powder Foam
- **Unsuitable extinguishing media**
  - Full water jet Strong water jet

5.2 **Special hazards arising from the substance or mixture**
- **Hazardous combustion products**
  - Carbon monoxide Carbon dioxide (CO2)

5.3 **Advice for firefighters**
- Use suitable breathing apparatus.
- **Special protective equipment for firefighters**
  - Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 **Additional information**
- Use water spray jet to protect personnel and to cool endangered containers. Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. The product itself does not burn. Coordinate fire-fighting measures to the fire surroundings.

**SECTION 6: Accidental release measures**

6.1 **Personal precautions, protective equipment and emergency procedures**
- Wear personal protection equipment (refer to section 8). Provide adequate ventilation. Remove persons to safety.

6.2 **Environmental precautions**
- Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3 **Methods and material for containment and cleaning up**
- **For cleaning up**
  - Suitable material for taking up: Universal binder
  - Clean contaminated articles and floor according to the environmental legislation. Retain contaminated washing water and dispose it. Dispose of waste according to applicable legislation.

6.4 **Reference to other sections**
- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

**SECTION 7: Handling and storage**
7.1 **Precautions for safe handling**
When using do not eat, drink, smoke, sniff.

**Protective measures**
All work processes must always be designed so that the following is excluded: Inhalation of vapours or spray/mists. Skin contact. Eye contact. Wear personal protection equipment (refer to section 8). Always close containers tightly after the removal of product. Do not breathe gas/fumes/vapour/spray. Use only in well-ventilated areas. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Measures to prevent fire**
The product is not: Flammable. Usual measures for fire prevention.

Fire class: -

Shake well before use nein

**Advices on general occupational hygiene**
P362+P364 - Take off contaminated clothing and wash it before reuse.

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

**Requirements for storage rooms and vessels**
Keep container tightly closed. Keep/Store only in original container. The floor should be leak tight, jointless and not absorbent. Ensure adequate ventilation of the storage area.

**Hints on joint storage**
Storage class (TRGS 510): 8B
Protect from frost nein

**Recommended storage temperature** 5 - 25 °C

**Further information on storage conditions**
Keep locked up and out of reach of children. Keep container tightly closed in a cool, well-ventilated place.

7.3 **Specific end use(s)**

**Recommendation**
Observe technical data sheet. Observe instructions for use.

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

8.1 **Control parameters**

**Occupational exposure limit values**
BUTYL CELLOSOLVE; CAS No.: 111-76-2

- **Limit value type (country of origin):** TRGS 900 (D)
  - Limit value: 20 ppm / 98 mg/m³
  - Peak limitation: 4(II)
  - Remark: H, Y
  - Version: 01.03.2018

- **Limit value type (country of origin):** TRGS 903 (D)
  - Parameter: Butoxy acetic acid / Urine (U) / At long term exposure: after several previous shifts
  - Limit value: 100 mg/l
  - Version: 01.03.2018

- **Limit value type (country of origin):** TRGS 903 (D)
  - Parameter: Butoxy acetic acid / Urine (U) / End of exposure or end of shift; At long term exposure: after several previous shifts
  - Limit value: 150 mg/g Kr
  - Version: 01.03.2018

- **Limit value type (country of origin):** STEL (EC)
  - Limit value: 50 ppm / 246 mg/m³
  - Remark: H
  - Version: 31.01.2018

- **Limit value type (country of origin):** TWA (EC)
  - Limit value: 20 ppm / 98 mg/m³
8.2 Exposure controls

Appropriate engineering controls
Ensure adequate ventilation of the storage area. Technical measures and the application of suitable work processes have priority over personal protection equipment.

Personal protection equipment

Eye/face protection

Suitable eye protection
Eye glasses with side protection goggles

Required properties
DIN EN 166

Skin protection

Hand protection
Suitable gloves type: Gloves with long cuffs
Suitable material: Data apply to the main component. Butyl caoutchouc, 0,5mm, >8h; FKM (fluoro rubber), 0,7mm, >8h;

Recommended glove articles: Manufacturer KCL GmbH/Eichenzell-Germany; Ansell/Yarra City-Australia Or comparable articles from other companies.

Additional hand protection measures: Check leak tightness/impermeability prior to use.

Remark: Breakthrough times and swelling properties of the material must be taken into consideration. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Barrier creams are not substitutes for body protection.

Body protection

Protective clothing.

Suitable protective clothing: Chemical protection clothing Chemical resistant safety shoes

Required properties: alkali-resistant.
Protective clothing: : DIN EN ISO 20345 DIN EN 13034 DIN EN 14605
footwear : DIN EN 14404

Remark: Barrier creams are not substitutes for body protection.

Respiratory protection

Usually no personal respirative protection necessary. Respiratory protection necessary at: insufficient ventilation aerosol or mist formation. high concentrations spray application

Suitable respiratory protection apparatus
Combination filtering device (EN 14387) Half-face mask (DIN EN 140) ABEK-P1

Remark: Use only respiratory protection equipment with CE-symbol including four digit test number. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

General health and safety measures

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. When using do not eat, drink, smoke, sniff. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. Wash contaminated clothing prior to re-use. Wash hands before breaks and after work. Apply skin care products after work. Do not breathe gas/fumes/vapour/spray.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Liquid
Colour: light yellow
Odour: perfumed

Safety relevant basis data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/melting range:</td>
<td>approx. -4 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>approx. 97 °C</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>not determined</td>
</tr>
<tr>
<td>Sustaining combustion:</td>
<td>No</td>
</tr>
<tr>
<td>Lower explosion limit:</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limit:</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>&lt; 3000 hPa</td>
</tr>
<tr>
<td>Density:</td>
<td>1,01 g/cm³</td>
</tr>
<tr>
<td>Solvent separation test:</td>
<td>&lt; 3 %</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>miscible</td>
</tr>
<tr>
<td>pH:</td>
<td>approx. 11</td>
</tr>
<tr>
<td>log P O/W:</td>
<td>not determined</td>
</tr>
<tr>
<td>Flow time:</td>
<td>approx. 13 s</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapourisation rate:</td>
<td>not determined</td>
</tr>
<tr>
<td>VOC content-EC:</td>
<td>approx. 9,9 Wt %</td>
</tr>
<tr>
<td>VOC-France:</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

(*) VOC-EC = „Volatile organic compound (VOC)“ means any organic compound having an initial boiling point less than or equal to 250°C measured at a standard pressure of 101,3 kPa; VOC-value in g/L

9.2 Other information
None

SECTION 10: Stability and reactivity

10.1 Reactivity
No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability
The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid
Stable under recommended storage and handling conditions.

10.5 Incompatible materials
The product develops hydrogen in an aqueous solution in contact with metals.

10.6 Hazardous decomposition products
Does not decompose when used for intended uses.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

There are no data available on the preparation/mixture itself. Data apply to the main component.

Acute oral toxicity

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exposure route</th>
<th>Species</th>
<th>Effective dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 ( BUTYL CELLOSOLVE ; CAS No. : 111-76-2 )</td>
<td>Oral</td>
<td>Rat</td>
<td>1300 mg/kg</td>
<td>OECD 401</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exposure route</th>
<th>Species</th>
<th>Effective dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )</td>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
<td>OECD 401</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exposure route</th>
<th>Species</th>
<th>Effective dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 ( Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl) dimethyl, ethoxylated, chlorides ; CAS No. : 1554325-20-0 )</td>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 300 - 2000 mg/kg</td>
<td>OECD 401</td>
</tr>
</tbody>
</table>

Acute dermal toxicity

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exposure route</th>
<th>Species</th>
<th>Effective dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 ( BUTYL CELLOSOLVE ; CAS No. : 111-76-2 )</td>
<td>Dermal</td>
<td>Guinea pig</td>
<td>&gt; 2000 mg/l</td>
<td>OECD 402</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exposure route</th>
<th>Species</th>
<th>Effective dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>9510 mg/kg</td>
<td>OECD 402</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exposure route</th>
<th>Species</th>
<th>Effective dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 ( Propylheptanolethoxilate ; CAS No. : 160875-66-1 )</td>
<td>Dermal</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
<td>OECD 402</td>
</tr>
</tbody>
</table>

Acute inhalation toxicity

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exposure route</th>
<th>Species</th>
<th>Effective dose</th>
<th>Exposure time</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )</td>
<td>Inhalation</td>
<td>Rat</td>
<td>3.35 mg/l</td>
<td>7 h</td>
<td>OECD 402</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Exposure route</th>
<th>Species</th>
<th>Effective dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 ( Propylheptanolethoxilate ; CAS No. : 160875-66-1 )</td>
<td>Inhalation</td>
<td>Rat</td>
<td>&gt; 20,1 mg/l</td>
<td>OECD 402</td>
</tr>
</tbody>
</table>

Specific symptoms in animal studies

There are no data available on the preparation/mixture itself.

Irritant and corrosive effects

Assessment/classification

Causes serious eye damage. Causes severe burns.

Sensitisation
There are no data available on the preparation/mixture itself.

Repeated dose toxicity (subacute, subchronic, chronic)
There are no data available on the preparation/mixture itself.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Carcinogenicity
There are no data available on the preparation/mixture itself.

Other information
No indication of human carcinogenicity.

Germ cell mutagenicity
There are no data available on the preparation/mixture itself.

No indications of human germ cell mutagenicity exist.

Reproductive toxicity
There are no data available on the preparation/mixture itself.

Other information
No indications of human reproductive toxicity exist.

Overall Assessment on CMR properties
The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

STOT—single exposure
See SECTION 2.1 (classification).

STOT—repeated exposure
See SECTION 2.1 (classification).

Aspiration hazard
See SECTION 2.1 (classification).

SECTION 12: Ecological information

12.1 Toxicity
Data apply to the main component. There are no data available on the preparation/mixture itself.

Aquatic toxicity
Chronic (long-term) fish toxicity
Parameter : NOEC (BUTYL CELLOSOLVE; CAS No.: 111-76-2)
Species : Fish
Effective dose : > 100 mg/l
Exposure time : 21 d

Chronic (long-term) daphnia toxicity
Parameter : NOEC (BUTYL CELLOSOLVE; CAS No.: 111-76-2)
Species : Daphnia
Effective dose : 100 mg/l
Exposure time : 21 d
Method : OECD 211

Acute (short-term) algae toxicity
Parameter : EC50 (BUTYL CELLOSOLVE; CAS No.: 111-76-2)
Species : Daphnia
Effective dose : 1550 mg/l
Exposure time : 48 h
Method : OECD 202

Parameter : EC50 (2-METHOXYMETHYLETHOXY)PROPANOL; CAS No.: 34590-94-8)
Species : Daphnia
Effective dose : 1919 mg/l
Exposure time : 48 h

Parameter : EC50 (Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl) dimethyl, ethoxylated, chlorides; CAS No.: 1554325-20-0)
Species : Daphnia
Effective dose : > 1 - 10 mg/l
Exposure time : 48 h
Parameter : EC50 ( Propylheptanolethoxilate ; CAS No. : 160875-66-1 )
Species : Daphnia
Effective dose : > 10 - 100 mg/l
Exposure time : 48 h

Effects in sewage plants
Observe local regulations concerning effluent treatment. Before discharge into sewage plants the product normally needs to be neutralised.

12.2 Persistence and degradability
There are no data available on the preparation/mixture itself.

Biodegradation
The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential
There are no data available on the preparation/mixture itself.

12.4 Mobility in soil
There are no data available on the preparation/mixture itself.

12.5 Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects
There are no data available on the preparation/mixture itself.

12.7 Additional ecotoxicological information
Additional information
The product has not been tested.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose according to legislation.
Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Product/Packaging disposal
Waste codes/waste designations according to EWC/AVV
Waste code product
Waste code (EWC/AVV) : 07 06 08*

Waste code packaging
Waste code packaging: 15 01 10*

Waste treatment options
29/35 - Do not empty into drains; dispose of this material and its container in a safe way. Delivery to an approved waste disposal company.

Appropriate disposal / Package
Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of.

13.2 Additional information
These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

SECTION 14: Transport information

14.1 UN number
UN 1719

14.2 UN proper shipping name
Land transport (ADR/RID)
Trade name : Lithofin Basic Cleaner

Revision date : 30.01.2019
Print date : 06.02.2019
Version (Revision) : 4.0.2 (4.0.1)

CAUSTIC ALKALI LIQUID, N.O.S. ( Glutamic acid, N,N-diacectic acid, tetrasodium salt )

Sea transport (IMDG)
CAUSTIC ALKALI LIQUID, N.O.S. ( Glutamic acid, N,N-diacectic acid, tetrasodium salt )

Air transport (ICAO-TI / IATA-DGR)
CAUSTIC ALKALI LIQUID, N.O.S. ( Glutamic acid, N,N-diacectic acid, tetrasodium salt )

14.3 Transport hazard class(es)

Land transport (ADR/RID)
Class(es) : 8
Classification code : C5
Hazard identification number (Kemler No.) : 80
Tunnel restriction code : E
Special provisions : LQ 5 l · E 1
Hazard label(s) : 8

Sea transport (IMDG)
Class(es) : 8
EmS-No. : F-A / S-B
Special provisions : LQ 5 l · E 1 · IMDG-Code segregation group 18 · Alkalis
Hazard label(s) : 8

Air transport (ICAO-TI / IATA-DGR)
Class(es) : 8
Special provisions : E 1
Hazard label(s) : 8

14.4 Packing group
III

14.5 Environmental hazards

Land transport (ADR/RID) : No
Sea transport (IMDG) : No
Air transport (ICAO-TI / IATA-DGR) : No

14.6 Special precautions for user
None

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
not required.

SECTION 15: Regulatory information

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

EU legislation
REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (clp)
EN 2:1992 (DIN EN 2:2005 - 01)

Authorisations and/or restrictions on use

Restrictions on use
Use restriction according to REACH annex XVII, no. : None, if handled according to order.

Restrictions of occupation
Observe restrictions to employment for juvenils according to the ‘juvenile work protection guideline’ (94/33/EC).
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Other regulations (EU)
Regulation (EC) No. 648/2004 (Detergents regulation)
REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the export and import of hazardous chemicals [PIC-Regulation]
REGULATION (EU) No 98/2013 on the marketing and use of explosives precursors: Not applicable.

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer
Not applicable.
Contains the following substances that deplete the ozone layer: -

Regulation (EC) No 850/2004 [POP-Regulation]
Not applicable.
Name of the persistent organic pollutant (POP): -

National regulations
Observe in addition any national regulations!
Germany:
TRGS 400 (Risk assessment for activities involving hazardous substances)
TRGS 500 (Protective measures)
TRGS 510 (Storage of hazardous substances in non-stationary containers)
TRGS 555 (Working instruction and information for workers)

Water hazard class (WGK)
Class : 1 (Slightly hazardous to water) Classification according to AwSV

Other regulations, restrictions and prohibition regulations
Switzerland
VOCV-Regulation
Maximum VOC content (Switzerland) : 6 Wt % according to VOCV

15.2 Chemical safety assessment
For this substance/mixture a chemical safety assessment has not been carried out.

15.3 Additional information

SECTION 16: Other information

16.1 Indication of changes
07. Hints on joint storage - Storage class

16.2 Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC-Pulver</td>
<td>Extinguishing powder for fire class A, B and C</td>
</tr>
<tr>
<td>ABEK-P1</td>
<td>combination filter</td>
</tr>
<tr>
<td>ADR</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>AVV</td>
<td>Abfallverzeichnis-Verordnung (Waste Regulation)</td>
</tr>
<tr>
<td>AWSV</td>
<td>Ordinance on facilities for the handling of substances hazardous to water</td>
</tr>
<tr>
<td>BGR</td>
<td>BG rules and regulations</td>
</tr>
<tr>
<td>ca.</td>
<td>circa</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>CLP</td>
<td>classification, labelling and packaging</td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogen, mutagen or toxic for reproduction</td>
</tr>
<tr>
<td>DIN</td>
<td>German Institute for Standardization</td>
</tr>
<tr>
<td>DRL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>EAK/EWC/EAC/CWR/CER</td>
<td>European Waste Catalogue</td>
</tr>
<tr>
<td>EC50 / CE50</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>EG / EC / CE</td>
<td>European Community</td>
</tr>
<tr>
<td>EN</td>
<td>European Standard</td>
</tr>
<tr>
<td>EUH</td>
<td>supplemental hazard statement of the european union</td>
</tr>
<tr>
<td>GefStoffV</td>
<td>Gefahrstoffverordnung (Hazardous Substances Ordinance)</td>
</tr>
<tr>
<td>GHS / SGH</td>
<td>Globally Harmonised System</td>
</tr>
<tr>
<td>H-Sätze</td>
<td>hazard statements</td>
</tr>
</tbody>
</table>
IATA-DGR: International Air Transport Association-Dangerous Goods Regulations
IBC-Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI: International Civil Aviation Organization-Technical Instructions
IMDG-Code: International Maritime Dangerous Goods Code
ISO: International Organization for Standardization
LC50 / CL50: Lethal Concentration 50%
LD50 / DL50: Lethal Dose 50%
log P O/W: Partition coefficient n-octanol/water
MARPOL: International Convention for the Prevention of Pollution from Ships (marine pollution)
NOAEL (DSET): No observed adverse effect level
NOEC (CSEO): No observed effect concentration
Nr.: Number
OECD: Organisation for Economic Co-operation and Development
PBT: persistent, bioaccumulative and toxic
pH: Potentia hydrogenii
PIC: prior informed consent
PNEC: Predicted No-Effect Concentration
POP: Persistent organic pollutants
P-Sätze: precautionary statements
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: International Carriage of Dangerous Goods by Rail
STEL / LECT: short-term exposure limit
TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)
TWA / MPT: time-weighted average
UN/ONU: United Nations
VOC/COV/VOS/LZO: Volatile Organic Compound
VOCV: Ordinance on the Incentive Tax on Volatile Organic Compounds (SR 814.018)
vPvB: very persistent and very bioaccumulative
WGK: Wassergefährdungsklasse (Water hazard class)

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu. For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

16.3 Key literature references and sources for data
Regulation (EC) No 1272/2008 (GHS)
REACH Art. 59: -Candidate List of substances of very high concern for Authorisation (https://www.echa.europa.eu/candidate-list-table)

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
Hazard statements for physical hazards: On basis of test data.
Hazard statements for health hazards: Calculation method.
Hazard statements for environmental hazards: Calculation method.

16.5 Relevant H- and EUH-phrases (Number and full text)
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
16.6 Training advice
   None

16.7 Additional information
   None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.