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Revision date / version: 12.11.2023 / 0035

Replacing version dated / version: 10.03.2023 / 0034

Valid from: 12.11.2023 PDF print date: 13.11.2023 Catalytic-System Clean

# Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

#### 1.1 Product identifier

## **Catalytic-System Clean**

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture:

Additives

## **Uses advised against:**

No information available at present.

## 1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH Jerg-Wieland-Str. 4 89081 Ulm-Lehr

Tel.: (+49) 0731-1420-0 Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

#### 1.4 Emergency telephone number

## Emergency information services / official advisory body:

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### Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

+1 872 5888271 (LMR)

## **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)
Hazard class Hazard category Hazard statement

Asp. Tox. 1 H304-May be fatal if swallowed and enters airways. Aquatic Chronic 3 H412-Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)





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H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children. P301+P310-IF SWALLOWED: Immediately call a POISON CENTER / doctor. P331-Do NOT induce vomiting. P405-Store locked up.

P501-Dispose of contents / container to an approved waste disposal facility.

EUH066-Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hydrocarbons, C10, aromatics, >1% naphthalene

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

## **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

## n.a. **3.2 Mixtures**

| OIZ MIXEGO   |                       |
|--|-----------------------|
| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics   |                       |
| Registration number (REACH)  | 01-2119457273-39-XXXX |
| Index  |                       |
| EINECS, ELINCS, NLP, REACH-IT List-No.                                 | 918-481-9             |
| CAS  |                       |
| content %  | 80-<100               |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | EUH066                |
|  | Asp. Tox. 1. H304     |

| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics   |                       |
|--|-----------------------|
| Registration number (REACH)  | 01-2119456620-43-XXXX |
| Index  |                       |
| EINECS, ELINCS, NLP, REACH-IT List-No.                                 | 926-141-6             |
| CAS  |                       |
| content %  | 1-<2,5                |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | EUH066                |
|  | Asp. Tox. 1. H304     |

| Hydrocarbons, C10, aromatics, >1% naphthalene                          |                         |
|--|-------------------------|
| Registration number (REACH)  | 01-2119463588-24-XXXX   |
| Index  |                         |
| EINECS, ELINCS, NLP, REACH-IT List-No.                                 | 919-284-0               |
| CAS  | (64742-94-5)            |
| content %  | 1-<2,5                  |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | EUH066                  |
|  | Carc. 2, H351           |
|  | STOT SE 3, H336         |
|  | Asp. Tox. 1, H304       |
|  | Aguatic Chronic 2. H411 |

| Naphthalene                            | Substance for which an EU exposure limit value applies. |
|--|---|
| Registration number (REACH)            |   |
| Index                                  | 601-052-00-2  |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 202-049-5   |
| EINECS, ELINCS, NLP, REACH-II LIST-NO. | 202-049-5   |



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| CAS  | 91-20-3                       |
|--|-------------------------------|
| content %  | 0,1-<0,25                     |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Acute Tox. 4, H302            |
|  | Carc. 2, H351                 |
|  | Aquatic Acute 1, H400 (M=1)   |
|  | Aguatic Chronic 1, H410 (M=1) |

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here. Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here. A classification for the mixture with Carc. 2, H351 is not required as the naphthalene content in the product is < 1%. There are no other ingredients with this classification.

The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

If the person is unconscious, place in a stable side position and consult a doctor.

Respiratory arrest - Artificial respiration apparatus necessary.

#### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Protective hand cream recommended.

#### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

### Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

Danger of aspiration.

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

The following may occur:

Irritation of the eyes

Irritation of the respiratory tract

Headaches

Dizziness

Effects/damages the central nervous system

Coordination disorders

Unconsciousness

Liver and kidney damage

Blood count modifications

Nausea

Vomiting

Danger of aspiration.

Oedema of the lungs

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

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

Ingestion:



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Activated carbon

Gastric lavage (stomach washing) only under endotracheal intubation. Subsequent observation for pneumonia and pulmonary oedema.

## **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media Suitable extinguishing media

CO<sub>2</sub>

Extinction powder

Foam

Water jet spray

## Unsuitable extinguishing media

High volume water jet

## 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Hvdrocarbons

Toxic pyrolysis products.

Explosive vapour/air or gas/air mixtures.

## 5.3 Advice for firefighters

For personal protective equipment see Section 8.

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

#### SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

### 6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.

Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping.

#### 6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

#### 6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

If accidental entry into drainage system occurs, inform responsible authorities.

## 6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13. Ensure sufficient ventilation.

#### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## **SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.



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## 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Keep away from sources of ignition - Do not smoke.

Do not heat to temperatures close to flash point.

Avoid contact with eyes or skin.

Do not carry cleaning cloths soaked in product in trouser pockets.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

## 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

Solvent resistant floor

Do not store with oxidizing agents.

Store in a well ventilated place.

Protect from direct sunlight and warming.

#### 7.3 Specific end use(s)

No information available at present.

Observe the instructions for good working practice and the recommendations for risk assessment.

Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

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

#### 8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

| Chemical Name                            |   |                                       |  |  |  |  |  |  |  |  |
|--|---|---------------------------------------|--|--|--|--|--|--|--|--|
| WEL-TWA: 800 mg/m3                       | WEL-STEL:   |                                       |  |  |  |  |  |  |  |  |
| Monitoring procedures:                   | ing procedures: - Draeger - Hydrocarbons 0,1%/c (81 03 571)   |                                       |  |  |  |  |  |  |  |  |
| - Draeger - Hydrocarbons 2/a (81 03 581) |   |                                       |  |  |  |  |  |  |  |  |
|  | - Compur - KÍTA-187 S (551 174)                               |                                       |  |  |  |  |  |  |  |  |
| BMGV:                                    |   | information: (OEL acc. to RCP-method, |  |  |  |  |  |  |  |  |
|  |   | aphs 84-87, EH40)                     |  |  |  |  |  |  |  |  |
| Chemical Name                            | Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2%    | aromatics                             |  |  |  |  |  |  |  |  |
| WEL-TWA: 1200 mg/m3 (>=C7 nc             |   |                                       |  |  |  |  |  |  |  |  |
| chain alkanes)                           |   |                                       |  |  |  |  |  |  |  |  |
| Monitoring procedures:                   | <ul> <li>Draeger - Hydrocarbons 0,1%/c (81 03 571)</li> </ul> | )                                     |  |  |  |  |  |  |  |  |
|  | - Draeger - Hydrocarbons 2/a (81 03 581)                      |                                       |  |  |  |  |  |  |  |  |
|  | - Compur - KÍTA-187 S (551 174)                               |                                       |  |  |  |  |  |  |  |  |
| BMGV:                                    |   | information:                          |  |  |  |  |  |  |  |  |
| Chemical Name                            | Hydrocarbons, C10, aromatics, >1% naphthalene                 |                                       |  |  |  |  |  |  |  |  |
| WEL-TWA: 500 mg/m3 (Aromatics            | WEL-STEL:   |                                       |  |  |  |  |  |  |  |  |
| Monitoring procedures:                   | <ul> <li>Draeger - Hydrocarbons 0,1%/c (81 03 571)</li> </ul> | )                                     |  |  |  |  |  |  |  |  |
|  | - Draeger - Hydrocarbons 2/a (81 03 581)                      |                                       |  |  |  |  |  |  |  |  |
|  | - Compur - KÍTA-187 S (551 174)                               |                                       |  |  |  |  |  |  |  |  |
| BMGV:                                    | Other i   | information:                          |  |  |  |  |  |  |  |  |
| Chemical Name                            | Naphthalene   |                                       |  |  |  |  |  |  |  |  |
|  | •   |                                       |  |  |  |  |  |  |  |  |



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| WEL-TWA: 500 mg/m3 (Aromatics) (WEL), 10 ppm | WEL-STEL:                                   |                    |
|--|---|--------------------|
| (50 mg/m3) (EU)                              |   |                    |
| Monitoring procedures: -                     | Compur - KITA-153 U(C) (551 182)            |                    |
| -  | NIOSH 5506 (POLYNUCLEAR AROMATIC HYDROCARBO | NS by HPLC) - 1998 |
| -  | NIOSH 5515 (POLYNUCLEAR AROMATIC HYDROCARBO | NS by GC) - 1994   |
| -  | OSHA 35 (Napthalene) - 1982                 |                    |
| BMGV:  | Other information:                          |                    |

| Area of application  | Exposure route /          | Effect on health            | Descriptor | Value | Unit            | Note  |
|----------------------|---------------------------|-----------------------------|------------|-------|-----------------|-------|
| , a ca c. approance. | Environmental compartment |                             | 2 cccp.c.  | raido | 5               | 11010 |
| Consumer             | Human - dermal            | Long term, systemic effects | DNEL       | 7,5   | mg/kg<br>bw/day |       |
| Consumer             | Human - inhalation        | Long term, systemic effects | DNEL       | 32    | mg/m3           |       |
| Consumer             | Human - oral              | Long term, systemic effects | DNEL       | 7,5   | mg/kg<br>bw/day |       |
| Workers / employees  | Human - dermal            | Long term, systemic effects | DNEL       | 12,5  | mg/kg<br>bw/day |       |
| Workers / employees  | Human - inhalation        | Long term, systemic effects | DNEL       | 151   | mg/m3           |       |

| Naphthalene         |   |                             |            |        |                     |      |
|---------------------|---|-----------------------------|------------|--------|---------------------|------|
| Area of application | Exposure route /                              | Effect on health            | Descriptor | Value  | Unit                | Note |
|                     | Environmental                                 |                             |            |        |                     |      |
|                     | compartment                                   |                             |            |        |                     |      |
|                     | Environment - freshwater                      |                             | PNEC       | 2,4    | μg/l                |      |
|                     | Environment - marine                          |                             | PNEC       | 0,24   | μg/l                |      |
|                     | Environment - sewage treatment plant          |                             | PNEC       | 2,9    | mg/l                |      |
|                     | Environment - sediment, freshwater            |                             | PNEC       | 0,0672 | mg/kg dry<br>weight |      |
|                     | Environment - sediment, marine                |                             | PNEC       | 0,0672 | mg/kg dry<br>weight |      |
|                     | Environment - soil                            |                             | PNEC       | 0,0533 | mg/kg dry<br>weight |      |
|                     | Environment - sporadic (intermittent) release |                             | PNEC       | 0,02   | mg/l                |      |
| Workers / employees | Human - dermal                                | Long term, systemic effects | DNEL       | 3,57   | mg/kg<br>bw/day     |      |
| Workers / employees | Human - inhalation                            | Long term, systemic effects | DNEL       | 25     | mg/m3               |      |
| Workers / employees | Human - inhalation                            | Long term, local effects    | DNEL       | 25     | mg/m3               |      |

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW =

- "Arbeitsplatzgrenzwert" (workplace limit value, Germany).
  (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).
- (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
- \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.
- (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

### 8.2 Exposure controls

## 8.2.1 Appropriate engineering controls



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Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

## 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Solvent resistant protective gloves (EN ISO 374).

If applicable

Protective Viton® / fluoroelastomer gloves (EN ISO 374).

Permeation time (penetration time) in minutes:

>480

Minimum layer thickness in mm:

0,4

Protective hand cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:

If OES or MEL is exceeded.

Gas mask filter A (EN 14387), code colour brown

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state:

Colour:

Colour:

Colour:

Colour:

Colour:

Clear

Characteristic

Melting point/freezing point: There is no information available on this parameter.

Boiling point or initial boiling point and boiling range:



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Flammability:

Lower explosion limit: Upper explosion limit:

Flash point:

Auto-ignition temperature: Decomposition temperature:

pH:

Kinematic viscosity:

Solubility:

Partition coefficient n-octanol/water (log value):

Vapour pressure:

Density and/or relative density: Relative vapour density: Particle characteristics:

9.2 Other information

Explosives:

Oxidising liquids:

Flammable

There is no information available on this parameter. There is no information available on this parameter.

>61 °C

There is no information available on this parameter. There is no information available on this parameter.

Mixture is non-soluble (in water).

<7 mm2/s (40°C)

Insoluble

Does not apply to mixtures.

There is no information available on this parameter.

0,765 g/ml (20°C) Vapours heavier than air. Does not apply to liquids.

Product is not explosive. When using: development of explosive

vapour/air mixture possible.

No

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

The product has not been tested.

## 10.2 Chemical stability

Stable with proper storage and handling.

## 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

#### 10.4 Conditions to avoid

Heating, open flame, ignition sources

## 10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

## 10.6 Hazardous decomposition products

No decomposition when used as directed.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Possibly more information on health effects, see Section 2.1 (classification).

| Toxicity / effect                | Endpoint | Value | Unit | Organism | Test method | Notes          |
|----------------------------------|----------|-------|------|----------|-------------|----------------|
| Acute toxicity, by oral route:   |          |       |      |          |             | n.d.a.         |
| Acute toxicity, by dermal route: |          |       |      |          |             | n.d.a.         |
| Acute toxicity, by inhalation:   |          |       |      |          |             | n.d.a.         |
| Skin corrosion/irritation:       |          |       |      |          |             | n.d.a.         |
| Serious eye damage/irritation:   |          |       |      |          |             | n.d.a.         |
| Respiratory or skin              |          |       |      |          |             | n.d.a.         |
| sensitisation:                   |          |       |      |          |             |                |
| Germ cell mutagenicity:          |          |       |      |          |             | n.d.a.         |
| Carcinogenicity:                 |          |       |      |          |             | negative, the  |
|                                  |          |       |      |          |             | real           |
|                                  |          |       |      |          |             | Naphthalene    |
|                                  |          |       |      |          |             | content is <1% |
| Reproductive toxicity:           |          |       |      |          |             | n.d.a.         |
| Specific target organ toxicity - |          |       |      |          |             | n.d.a.         |
| single exposure (STOT-SE):       |          |       |      |          |             |                |
| Specific target organ toxicity - |          |       |      |          |             | n.d.a.         |
| repeated exposure (STOT-RE):     |          |       |      |          |             |                |
| Aspiration hazard:               |          |       |      |          |             | n.d.a.         |
| Symptoms:                        |          |       |      |          |             | n.d.a.         |



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| Toxicity / effect                          | Endpoint | Value   | Unit               | Organism    | Test method              | Notes             |
|--|----------|---------|--------------------|-------------|--------------------------|-------------------|
| Acute toxicity, by oral route:             | LD50     | >5000   | mg/kg              | Rat         | OECD 401 (Acute Oral     | Analogous         |
| <b>,</b> ,                                 |          |         |                    |             | Toxicity)                | conclusion        |
| Acute toxicity, by dermal route:           | LD50     | >5000   | mg/kg              | Rabbit      | OECD 402 (Acute          | Analogous         |
|  |          |         | 1119/119           |             | Dermal Toxicity)         | conclusion        |
| Acute toxicity, by inhalation:             | LC50     | >4951   | mg/m3/4h           | Rat         | OECD 403 (Acute          | Analogous         |
| ricute termenty, by minutation             |          | 7 .00 . | 1.1.9, 1.1.0, 1.1. |             | Inhalation Toxicity)     | conclusion,       |
|  |          |         |                    |             | a.a                      | Vapours           |
| Skin corrosion/irritation:                 |          |         |                    |             | OECD 404 (Acute          | Not irritant,     |
| Chin con colon, in talien.                 |          |         |                    |             | Dermal                   | Analogous         |
|  |          |         |                    |             | Irritation/Corrosion)    | conclusion        |
| Serious eye damage/irritation:             |          |         |                    |             | OECD 405 (Acute Eye      | Not irritant,     |
| Senous eye damage/imation.                 |          |         |                    |             | Irritation/Corrosion)    | Analogous         |
|  |          |         |                    |             | intation/Corrosion)      | conclusion        |
| Respiratory or skin                        |          |         |                    |             | OECD 406 (Skin           | Not sensitizising |
| sensitisation:                             |          |         |                    |             | Sensitisation)           | Analogous         |
| sensitisation.                             |          |         |                    |             | Sensitisation)           |                   |
| Course call manufactions are a significant |          |         |                    |             | OEOD 472 (lp.) //tro     | conclusion        |
| Germ cell mutagenicity:                    |          |         |                    |             | OECD 473 (In Vitro       | Negative,         |
|  |          |         |                    |             | Mammalian                | Analogous         |
|  |          |         |                    |             | Chromosome               | conclusion        |
|  |          |         |                    |             | Aberration Test)         | NI d              |
| Germ cell mutagenicity:                    |          |         |                    |             | OECD 474 (Mammalian      | Negative,         |
|  |          |         |                    |             | Erythrocyte              | Analogous         |
|  |          |         |                    |             | Micronucleus Test)       | conclusion        |
| Germ cell mutagenicity:                    |          |         |                    | Salmonella  | OECD 471 (Bacterial      | Negative          |
|  |          |         |                    | typhimurium | Reverse Mutation Test)   |                   |
| Carcinogenicity:                           |          |         |                    |             | OECD 453 (Combined       | Negative,         |
|  |          |         |                    |             | Chronic                  | Analogous         |
|  |          |         |                    |             | Toxicity/Carcinogenicity | conclusion        |
|  |          |         |                    |             | Studies)                 |                   |
| Reproductive toxicity:                     |          |         |                    |             | OECD 414 (Prenatal       | Negative,         |
|  |          |         |                    |             | Developmental Toxicity   | Analogous         |
|  |          |         |                    |             | Study)                   | conclusion        |
| Specific target organ toxicity -           |          |         |                    |             | OECD 408 (Repeated       | Negative,         |
| repeated exposure (STOT-RE):               |          |         |                    |             | Dose 90-Day Oral         | Analogous         |
|  |          |         |                    |             | Toxicity Study in        | conclusion        |
|  |          |         |                    |             | Rodents)                 |                   |
| Aspiration hazard:                         |          |         |                    |             |                          | Yes               |
| Symptoms:                                  |          |         |                    |             |                          | unconsciousnes    |
|  |          |         |                    |             |                          | , headaches,      |
|  |          |         |                    |             |                          | dizziness,        |
|  |          |         |                    |             |                          | mucous            |
|  |          |         |                    |             |                          | membrane          |
|  |          | 1       |                    |             |                          | irritation        |

| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics |          |       |          |          |                       |                   |
|--|----------|-------|----------|----------|-----------------------|-------------------|
| Toxicity / effect  | Endpoint | Value | Unit     | Organism | Test method           | Notes             |
| Acute toxicity, by oral route:                                       | LD50     | >5000 | mg/kg    | Rat      | OECD 401 (Acute Oral  |                   |
|  |          |       |          |          | Toxicity)             |                   |
| Acute toxicity, by dermal route:                                     | LD50     | >5000 | mg/kg    | Rabbit   | OECD 402 (Acute       |                   |
|  |          |       |          |          | Dermal Toxicity)      |                   |
| Acute toxicity, by inhalation:                                       | LC50     | >5000 | mg/m3/8h | Rat      | OECD 403 (Acute       | Vapours           |
|  |          |       |          |          | Inhalation Toxicity)  |                   |
| Skin corrosion/irritation:   |          |       |          |          | OECD 404 (Acute       | Analogous         |
|  |          |       |          |          | Dermal                | conclusion,       |
|  |          |       |          |          | Irritation/Corrosion) | Drying of the     |
|  |          |       |          |          |                       | skin., Dermatitis |
|  |          |       |          |          |                       | (skin             |
|  |          |       |          |          |                       | inflammation)     |
| Serious eye damage/irritation:                                       |          |       |          |          | OECD 405 (Acute Eye   | Analogous         |
| _  |          |       |          |          | Irritation/Corrosion) | conclusion,       |
|  |          |       |          |          | ,                     | Slightly irritant |



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| Respiratory or skin sensitisation:                            |       |        |               | Guinea pig  | OECD 406 (Skin<br>Sensitisation)  | No (skin<br>contact),<br>Analogous  |
|---|-------|--------|---------------|-------------|---|---|
|   |       |        |               |             |   | conclusion  |
| Germ cell mutagenicity:                                       |       |        |               | Mouse       | in vivo   | Negative  |
| Germ cell mutagenicity:                                       |       |        |               | Salmonella  | OECD 471 (Bacterial   | Negative,   |
|   |       |        |               | typhimurium | Reverse Mutation Test)  | Analogous conclusion  |
| Germ cell mutagenicity:                                       |       |        |               |             | OECD 473 (In Vitro<br>Mammalian<br>Chromosome<br>Aberration Test)       | Negative  |
| Germ cell mutagenicity:                                       |       |        |               | Mouse       | OECD 476 (In Vitro<br>Mammalian Cell Gene<br>Mutation Test)             | Negative,<br>Analogous<br>conclusion  |
| Carcinogenicity:  |       |        |               |             | OECD 453 (Combined<br>Chronic<br>Toxicity/Carcinogenicity<br>Studies)   | Analogous conclusion, Negative  |
| Reproductive toxicity:  |       |        |               |             | OECD 414 (Prenatal<br>Developmental Toxicity<br>Study)                  | Analogous<br>conclusion,<br>Negative  |
| Specific target organ toxicity - single exposure (STOT-SE):   |       |        |               |             |   | Analogous<br>conclusion, No<br>indications of<br>such an effect.                |
| Specific target organ toxicity - repeated exposure (STOT-RE): | NOAEL | >=1000 | mg/kg<br>bw/d | Rat         | OECD 408 (Repeated<br>Dose 90-Day Oral<br>Toxicity Study in<br>Rodents) |   |
| Aspiration hazard:  |       |        |               |             |   | Yes   |
| Symptoms:   |       |        |               |             |   | drying of the skin., headaches, fatigue, dizziness, nausea, diarrhoea, vomiting |

| Toxicity / effect                | Endpoint | Value | Unit  | Organism | Test method  | Notes   |
|----------------------------------|----------|-------|-------|----------|--|---|
| Acute toxicity, by oral route:   | LD50     | >5000 | mg/kg | Rat      | OECD 401 (Acute Oral Toxicity)                       |   |
| Acute toxicity, by oral route:   | LD50     | >5000 | mg/kg | Rat      | OECD 420 (Acute Oral toxicity - Fixe Dose Procedure) |   |
| Acute toxicity, by oral route:   | LD50     | 6318  | mg/kg | Rat      | OECD 401 (Acute Oral Toxicity)                       |   |
| Acute toxicity, by dermal route: | LD50     | >2000 | mg/kg | Rabbit   | OECD 402 (Acute<br>Dermal Toxicity)                  | Analogous conclusion  |
| Acute toxicity, by inhalation:   | LC50     | >4688 | mg/m3 | Rat      | OECD 403 (Acute<br>Inhalation Toxicity)              |   |
| Skin corrosion/irritation:       |          |       |       |          |  | Repeated<br>exposure may<br>cause skin<br>dryness or<br>cracking. |
| Skin corrosion/irritation:       |          |       |       | Rabbit   | OECD 404 (Acute<br>Dermal<br>Irritation/Corrosion)   | Not irritant,<br>Analogous<br>conclusion                          |
| Serious eye damage/irritation:   |          |       |       | Rabbit   | OECD 405 (Acute Eye Irritation/Corrosion)            | Not irritant,<br>Analogous<br>conclusion                          |



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| Respiratory or skin sensitisation:   |       |      |       | Guinea pig                | OECD 406 (Skin<br>Sensitisation)  | No (skin contact), Analogous conclusion                                     |
|--|-------|------|-------|---------------------------|---|---|
| Germ cell mutagenicity:  |       |      |       | Mammalian                 | OECD 479 (Genetic<br>Toxicology - In Vitro<br>Sister Chromatid<br>Exchange assay in<br>Mammalian Cells) | Negative,<br>Analogous<br>conclusion  |
| Germ cell mutagenicity:  |       |      |       | Salmonella<br>typhimurium | OECD 471 (Bacterial<br>Reverse Mutation Test)   | Negative,<br>Analogous<br>conclusion  |
| Germ cell mutagenicity:  |       |      |       |                           | OECD 473 (In Vitro<br>Mammalian<br>Chromosome<br>Aberration Test)                                       | Negative,<br>Analogous<br>conclusionChine<br>e hamster                      |
| Germ cell mutagenicity:  |       |      |       | Mouse                     | OECD 474 (Mammalian<br>Erythrocyte<br>Micronucleus Test)  | Negative  |
| Germ cell mutagenicity:  |       |      |       | Mammalian                 | OECD 475 (Mammalian<br>Bone Marrow<br>Chromosome<br>Aberration Test)                                    | Negative,<br>Analogous<br>conclusion  |
| Reproductive toxicity (Developmental toxicity):  | NOAEL | >450 | mg/kg | Rat                       | OECD 415 (One-<br>Generation<br>Reproduction Toxicity<br>Study)   | Negative,<br>Analogous<br>conclusion  |
| Reproductive toxicity (Effects on fertility):  |       |      |       | Rat                       | OECD 415 (One-<br>Generation<br>Reproduction Toxicity<br>Study)   | Negative,<br>Analogous<br>conclusion  |
| Reproductive toxicity:   |       |      |       |                           | OECD 414 (Prenatal<br>Developmental Toxicity<br>Study)  | Negative,<br>Analogous<br>conclusion  |
| Reproductive toxicity:   |       |      |       |                           | OECD 416 (Two-<br>generation<br>Reproduction Toxicity<br>Study)   | Negative,<br>Analogous<br>conclusion  |
| Specific target organ toxicity -<br>single exposure (STOT-SE):                         |       |      |       |                           | ,   | Vapours may<br>cause<br>drowsiness and<br>dizziness.,<br>STOT SE 3,<br>H336 |
| Specific target organ toxicity - repeated exposure (STOT-RE):                          |       |      |       |                           | OECD 452 (Chronic<br>Toxicity Studies)  | Negative,<br>Analogous<br>conclusion  |
| Aspiration hazard: Specific target organ toxicity - repeated exposure (STOT-RE), oral: | NOAEL | 750  | mg/kg | Rat                       | OECD 408 (Repeated<br>Dose 90-Day Oral<br>Toxicity Study in<br>Rodents)                                 | Yes Negative, Analogous conclusion  |
| Symptoms:  |       |      |       |                           | ,   | drowsiness,<br>headaches,<br>drowsiness,<br>dizziness                       |
| Specific target organ toxicity - repeated exposure (STOT-RE), dermal:                  | NOAEL | 495  | mg/kg | Rat                       | OECD 411 (Subchronic<br>Dermal Toxicity - 90-day<br>Study)  | Negative,<br>Analogous<br>conclusion  |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:                | NOAEL | 1000 | mg/m3 | Rat                       | OECD 413 (Subchronic<br>Inhalation Toxicity - 90-<br>Day Study)   | Negative,<br>Analogous<br>conclusion  |

### Naphthalene



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| Toxicity / effect   | Endpoint | Value | Unit    | Organism   | Test method   | Notes   |
|---|----------|-------|---------|------------|---|---|
| Acute toxicity, by oral route:  | LD50     | 490   | mg/kg   | Rat        |   |   |
| Acute toxicity, by dermal route:  | LD50     | >2500 | mg/kg   | Rat        |   |   |
| Acute toxicity, by inhalation:  | LD50     | >0,4  | mg/l/4h | Rat        | OECD 403 (Acute<br>Inhalation Toxicity)                                 | Vapours   |
| Respiratory or skin sensitisation:                                      |          |       |         | Guinea pig |   | No (skin contact  |
| Reproductive toxicity:  | NOAEL    | 120   | mg/kg   | Rabbit     | OECD 414 (Prenatal<br>Developmental Toxicity<br>Study)                  | Female  |
| Reproductive toxicity:  | LOAEL    | 50    | mg/kg   | Rat        | OECD 414 (Prenatal<br>Developmental Toxicity<br>Study)                  | Female  |
| Specific target organ toxicity - repeated exposure (STOT-RE), oral:     | LOAEL    | 400   | mg/kg   | Rat        | OECD 408 (Repeated<br>Dose 90-Day Oral<br>Toxicity Study in<br>Rodents) |   |
| Specific target organ toxicity - repeated exposure (STOT-RE), dermal:   | NOAEL    | 1000  | mg/kg   | Rat        | OECD 411 (Subchronic<br>Dermal Toxicity - 90-day<br>Study)              |   |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | LOAEL    | 0,011 | mg/l    | Rat        | OECD 413 (Subchronic<br>Inhalation Toxicity - 90-<br>Day Study)         | Vapours   |
| Symptoms:   |          |       |         |            |   | lack of appetite, ataxia, breathing difficulties, unconsciousnes, diarrhoea, cornea opacity, headaches, cramps, gastrointestinal disturbances, mucous membrane irritation, dizziness, nausea and vomiting., sweating, Reddening, eyes, reddened |

## 11.2. Information on other hazards

| Catalytic-System Clean           |          |       |      |          |             |                 |  |  |  |  |
|----------------------------------|----------|-------|------|----------|-------------|-----------------|--|--|--|--|
| Toxicity / effect                | Endpoint | Value | Unit | Organism | Test method | Notes           |  |  |  |  |
| Endocrine disrupting properties: |          |       |      |          |             | Does not apply  |  |  |  |  |
|                                  |          |       |      |          |             | to mixtures.    |  |  |  |  |
| Other information:               |          |       |      |          |             | No other        |  |  |  |  |
|                                  |          |       |      |          |             | relevant        |  |  |  |  |
|                                  |          |       |      |          |             | information     |  |  |  |  |
|                                  |          |       |      |          |             | available on    |  |  |  |  |
|                                  |          |       |      |          |             | adverse effects |  |  |  |  |
|                                  |          |       |      |          |             | on health.      |  |  |  |  |

| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics |          |       |      |          |             |              |  |  |  |  |
|--|----------|-------|------|----------|-------------|--------------|--|--|--|--|
| Toxicity / effect  | Endpoint | Value | Unit | Organism | Test method | Notes        |  |  |  |  |
| Other information:   |          |       |      |          |             | Repeated     |  |  |  |  |
|  |          |       |      |          |             | exposure may |  |  |  |  |
|  |          |       |      |          |             | cause skin   |  |  |  |  |
|  |          |       |      |          |             | dryness or   |  |  |  |  |
|  |          |       |      |          |             | cracking.    |  |  |  |  |



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## **SECTION 12: Ecological information**

Possibly more information on environmental effects, see Section 2.1 (classification).

| Catalytic-System Clean Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes             |
|--|----------|------|-------|------|----------|-------------|-------------------|
|  | Enapoint | Time | value | Unit | Organism | rest method |                   |
| 12.1. Toxicity to fish:                  |          |      |       |      |          |             | n.d.a.            |
| 12.1. Toxicity to daphnia:               |          |      |       |      |          |             | n.d.a.            |
| 12.1. Toxicity to algae:                 |          |      |       |      |          |             | n.d.a.            |
| 12.2. Persistence and                    |          |      |       |      |          |             | Isolate as much   |
| degradability:                           |          |      |       |      |          |             | as possible with  |
| ,  |          |      |       |      |          |             | an oil separator. |
| 12.3. Bioaccumulative                    |          |      |       |      |          |             | n.d.a.            |
| potential:                               |          |      |       |      |          |             |                   |
| 12.4. Mobility in soil:                  |          |      |       |      |          |             | n.d.a.            |
| 12.5. Results of PBT                     |          |      |       |      |          |             | n.d.a.            |
| and vPvB assessment                      |          |      |       |      |          |             |                   |
| 12.6. Endocrine                          |          |      |       |      |          |             | Does not apply    |
| disrupting properties:                   |          |      |       |      |          |             | to mixtures.      |
| 12.7. Other adverse                      |          |      |       |      |          |             | No information    |
| effects:                                 |          |      |       |      |          |             | available on      |
|  |          |      |       |      |          |             | other adverse     |
|  |          |      |       |      |          |             | effects on the    |
|  |          |      |       |      |          |             | environment.      |
| Other information:                       |          |      |       |      |          |             | According to the  |
|  |          |      |       |      |          |             | recipe, contains  |
|  |          |      |       |      |          |             | no AOX.           |

| Toxicity / effect                        | Endpoint | Time | Value   | Unit | Organism                         | Test method  | Notes                                      |
|--|----------|------|---------|------|----------------------------------|--|--|
| 12.1. Toxicity to fish:                  | NOELR    | 28d  | 0,101   | mg/l | Oncorhynchus mykiss              |  |  |
| 12.1. Toxicity to fish:                  | LL50     | 96h  | >1000   | mg/l | Oncorhynchus<br>mykiss           | OECD 203 (Fish,<br>Acute Toxicity<br>Test)                                     |  |
| 12.1. Toxicity to daphnia:               | EL50     | 48h  | >1000   | mg/l | Daphnia magna                    | OECD 202<br>(Daphnia sp.<br>Acute<br>Immobilisation<br>Test)                   |  |
| 12.1. Toxicity to daphnia:               | NOELR    | 21d  | 0,176   | mg/l | Daphnia magna                    |  |  |
| 12.1. Toxicity to algae:                 | EL50     | 72h  | >1000   | mg/l | Pseudokirchneriell a subcapitata | OECD 201 (Alga,<br>Growth Inhibition<br>Test)                                  |  |
| 12.2. Persistence and degradability:     |          | 28d  | 80      | %    | activated sludge                 | OECD 301 F<br>(Ready<br>Biodegradability -<br>Manometric<br>Respirometry Test) | Readily<br>biodegradable                   |
| 12.3. Bioaccumulative potential:         | BCF      |      | 10-2500 |      |                                  | , , ,  | High                                       |
| 12.5. Results of PBT and vPvB assessment |          |      |         |      |                                  |  | No PBT<br>substance, No<br>vPvB substance  |
| Other organisms:                         | EL50     | 48h  | >1000   | mg/l | Tetrahymen pyriformis            |  |  |
| Water solubility:                        |          |      |         |      |                                  |  | Product floats or<br>the water<br>surface. |

| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics |          |      |       |      |                        |             |       |  |  |  |  |
|--|----------|------|-------|------|------------------------|-------------|-------|--|--|--|--|
| Toxicity / effect  | Endpoint | Time | Value | Unit | Organism               | Test method | Notes |  |  |  |  |
| 12.1. Toxicity to fish:  | NOELR    | 28d  | 0,17  | mg/l | Oncorhynchus<br>mykiss | QSAR        |       |  |  |  |  |



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| 12.1. Toxicity to fish:    | LL50    | 96h | >1000 | mg/l | Oncorhynchus       | OECD 203 (Fish,    |                |
|----------------------------|---------|-----|-------|------|--------------------|--------------------|----------------|
|                            |         |     |       |      | mykiss             | Acute Toxicity     |                |
|                            |         |     |       |      |                    | Test)              |                |
| 12.1. Toxicity to daphnia: | NOELR   | 21d | 1,22  | mg/l | Daphnia magna      | QSAR               |                |
| 12.1. Toxicity to daphnia: | EL50    | 48h | >1000 | mg/l | Daphnia magna      | OECD 202           |                |
|                            |         |     |       |      |                    | (Daphnia sp.       |                |
|                            |         |     |       |      |                    | Acute              |                |
|                            |         |     |       |      |                    | Immobilisation     |                |
|                            |         |     |       |      |                    | Test)              |                |
| 12.1. Toxicity to algae:   | NOELR   | 72h | 1000  | mg/l | Pseudokirchneriell | OECD 201 (Alga,    |                |
| ,                          |         |     |       |      | a subcapitata      | Growth Inhibition  |                |
|                            |         |     |       |      | ·                  | Test)              |                |
| 12.2. Persistence and      |         | 28d | 69    | %    |                    | OECD 301 F         | Readily        |
| degradability:             |         |     |       |      |                    | (Ready             | biodegradable  |
| ğ ,                        |         |     |       |      |                    | Biodegradability - | ŭ              |
|                            |         |     |       |      |                    | Manometric         |                |
|                            |         |     |       |      |                    | Respirometry Test) |                |
| 12.3. Bioaccumulative      | Log Pow |     | 6-8   |      |                    | , ,                | High           |
| potential:                 | _       |     |       |      |                    |                    | _              |
| 12.5. Results of PBT       |         |     |       |      |                    |                    | No PBT         |
| and vPvB assessment        |         |     |       |      |                    |                    | substance, No  |
|                            |         |     |       |      |                    |                    | vPvB substance |
| Water solubility:          |         |     |       |      |                    |                    | Insoluble      |

| Toxicity / effect                        | Endpoint  | Time | Value   | Unit | Organism                         | Test method  | Notes  |
|--|-----------|------|---------|------|----------------------------------|--|--|
| 12.1. Toxicity to fish:                  | LL50      | 96h  | 2-5     | mg/l | Oncorhynchus mykiss              |  |  |
| 12.1. Toxicity to daphnia:               | EC50      | 48h  | 3-10    | mg/l | Daphnia magna                    | OECD 202<br>(Daphnia sp.<br>Acute<br>Immobilisation<br>Test)                   |  |
| 12.1. Toxicity to daphnia:               | NOEC/NOEL | 21d  | 0,48    | mg/l | Daphnia magna                    | ,  | Analogous conclusion                                 |
| 12.1. Toxicity to algae:                 | EL50      | 72h  | 11      | mg/l | Pseudokirchneriell a subcapitata |  |  |
| 12.1. Toxicity to algae:                 | NOELR     | 72h  | 2,5     | mg/l | Pseudokirchneriell a subcapitata |  |  |
| 12.2. Persistence and degradability:     |           | 28d  | 58      | %    | activated sludge                 | OECD 301 F<br>(Ready<br>Biodegradability -<br>Manometric<br>Respirometry Test) | Readily<br>biodegradable,<br>Analogous<br>conclusion |
| 12.3. Bioaccumulative potential:         | Log Pow   |      | 2,8-6,5 |      |                                  |  | High   |
| 12.3. Bioaccumulative potential:         | BCF       |      | 99-5780 |      |                                  |  | High   |
| 12.5. Results of PBT and vPvB assessment |           |      |         |      |                                  |  | No PBT<br>substance, No<br>vPvB substance            |

| Naphthalene                |           |      | Naphthalene |      |                           |             |  |  |  |  |  |  |  |  |
|----------------------------|-----------|------|-------------|------|---------------------------|-------------|--|--|--|--|--|--|--|--|
| Toxicity / effect          | Endpoint  | Time | Value       | Unit | Organism                  | Test method | Notes                                    |  |  |  |  |  |  |  |
| 12.1. Toxicity to fish:    | LC50      | 96h  | 1,99        | mg/l | Pimephales promelas       |             | Does not conform with EU classification. |  |  |  |  |  |  |  |
| 12.1. Toxicity to fish:    | LC50      | 96h  | 0,51        | mg/l |                           |             |  |  |  |  |  |  |  |  |
| 12.1. Toxicity to fish:    | LC50      | 96h  | 0,11        | mg/l | Oncorhynchus mykiss       |             |  |  |  |  |  |  |  |  |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | >60d | 0,6         | mg/l | Daphnia pulex             |             |  |  |  |  |  |  |  |  |
| 12.1. Toxicity to daphnia: | EC50      | 48h  | 1,6-24,1    | mg/l | Daphnia magna             |             |  |  |  |  |  |  |  |  |
| 12.1. Toxicity to algae:   | LC50      | 4h   | 2,96        | mg/l | Selenastrum capricornutum |             |  |  |  |  |  |  |  |  |



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| 12.1. Toxicity to algae:             | ErC50   | 72h | 0,4          | mg/l | Skeletonema costatum |                           |
|--------------------------------------|---------|-----|--------------|------|----------------------|---------------------------|
| 12.2. Persistence and degradability: |         | 28d | 2            | %    |                      | Not readily biodegradable |
| 12.3. Bioaccumulative potential:     | BCF     | 28d | 40-300       |      |                      | Lowfish                   |
| 12.4. Mobility in soil:              | Koc     |     | 817          |      |                      |                           |
| 12.4. Mobility in soil:              | Koc     |     | 240-<br>1300 |      |                      |                           |
| Other information:                   | BOD5    |     | 0            | %    |                      |                           |
| Other information:                   | COD     |     | 22           | %    |                      |                           |
| Other information:                   | Log Pow |     | 3,3          |      |                      |                           |

## **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

07 07 04 other organic solvents, washing liquids and mother liquors

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Implement substance recycling.

E.g. suitable incineration plant.

## For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

## **SECTION 14: Transport information**

#### **General statements**

Transport by road/by rail (ADR/RID)

14.1. UN number or ID number: Not applicable

14.2. UN proper shipping name: Not applicable

14.3. Transport hazard class(es):Not applicable14.4. Packing group:Not applicable14.5. Environmental hazards:Not applicableTunnel restriction code:Not applicableClassification code:Not applicableLQ:Not applicable

Transport category: Not applicable

Transport by sea (IMDG-code)

14.1. UN number or ID number: Not applicable

14.2. UN proper shipping name:

Not applicable

14.3. Transport hazard class(es):
14.4. Packing group:
14.5. Environmental hazards:
Mot applicable
Marine Pollutant:
Not applicable
EmS:
Not applicable

Transport by air (IATA)

14.1. UN number or ID number: Not applicable

14.2. UN proper shipping name:



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Not applicable

14.3. Transport hazard class(es):Not applicable14.4. Packing group:Not applicable14.5. Environmental hazards:Not applicable

### 14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

### 14.7. Maritime transport in bulk according to IMO instruments

Non-dangerous material according to Transport Regulations.

## **SECTION 15: Regulatory information**

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

Observe restrictions:

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)! Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC):

94,8 %

National requirements/regulations on safety and health protection must be applied when using work equipment.

## 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## **SECTION 16: Other information**

Revised sections:

8

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

# Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

| Classification in accordance with regulation | Evaluation method used                             |  |
|--|--|--|
| (EC) No. 1272/2008 (CLP)                     |  |  |
| Asp. Tox. 1, H304                            | Classification according to calculation procedure. |  |
| Aquatic Chronic 3, H412                      | Classification according to calculation procedure. |  |

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Asp. Tox. — Aspiration hazard

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Carc. — Carcinogenicity

STOT SE — Specific target organ toxicity - single exposure - narcotic effects

Acute Tox. — Acute toxicity - oral

Aquatic Acute — Hazardous to the aquatic environment - acute

## Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).



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Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as

amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

## Any abbreviations and acronyms used in this document:

acc., acc. to according, according to

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the

International Carriage of Dangerous Goods by Road)

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ASTM ASTM International (American Society for Testing and Materials)

ATE Acute Toxicity Estimate

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BSEF The International Bromine Council

bw body weight

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances

and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)

EC European Community
ECHA European Chemicals Agency
ECY ELY (Y = 0.3 5 10.30 50.80 1

ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ErCx, EµCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)

etc. et cetera EU European Union

EVAL Ethylene-vinyl alcohol copolymer

Fax. Fax number gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

Koc Adsorption coefficient of organic carbon in the soil

Kow octanol-water partition coefficient

IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

IUPAC International Union for Pure Applied Chemistry LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)

Log Koc Logarithm of adsorption coefficient of organic carbon in the soil

Log Kow, Log Pow Logarithm of octanol-water partition coefficient



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LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable n.av. not available n.c. not checked n.d.a. no data available

NIOSH National Institute for Occupational Safety and Health (USA)

NLP No-longer-Polymer

NOEC, NOEL No Observed Effect Concentration/Level

OECD Organisation for Economic Co-operation and Development

org. organic

OSHA Occupational Safety and Health Administration (USA)

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million PVC Polyvinylchloride

REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration,

Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List

Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

TOC Total organic carbon

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

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