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

1K-Nano

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

Relevant identified uses of the substance or mixture:
Sealing
Sector of use [SU]:
SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Chemical product category [PC]:
PC31 - Polishes and wax blends
Process category [PROC]:
PROC10 - Roller application or brushing
Environmental Release Category [ERC]:
ERC 5 - Use at industrial site leading to inclusion into/onto article
ERC 8a - Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC 8d - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

Koch-Chemie GmbH, Einsteinstrasse 42, 59423 Unna, Germany
Phone:+49 (0) 2303/9 86 70 - 0, Fax:+49 (0) 2303/9 86 70 - 26
KCU@KOCH-CHEMIE.de, www.KOCH-CHEMIE.de

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:

National Poisons Information Centre, Beaumont Hospital, Dublin 9, Ireland, Tel.:
+353 (0)1 809 2166 (Public Poisons Info Line, 8am-10pm, 7 days a week)
+353 (0)1 809 2566 (Info for Healthcare Professionals ONLY, 24 h, 7 days a week)

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (KCC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

<table>
<thead>
<tr>
<th>Hazard class</th>
<th>Hazard category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq.</td>
<td>2</td>
<td>H225-Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>Asp. Tox.</td>
<td>1</td>
<td>H304-May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td>STOT SE</td>
<td>3</td>
<td>H336-May cause drowsiness or dizziness.</td>
</tr>
<tr>
<td>Aquatic Chronic</td>
<td>2</td>
<td>H411-Toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>
2.2 Label elements
Labeling according to Regulation (EC) 1272/2008 (CLP)

Danger

H225: Highly flammable liquid and vapour. H304: May be fatal if swallowed and enters airways. H336: May cause drowsiness or dizziness. H411: Toxic to aquatic life with long lasting effects.


EUH066: Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
Hydrocarbons, C9-C10, 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 %).
Endangerment of potable water possible.

SECTION 3: Composition/information on ingredients

3.1 Substance
n.a.

3.2 Mixture

| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics | 01-2119473851-33-XXXX |
| Registration number (REACH) | --- |
| Index | --- |
| EINECS, ELINCS, NLP | 920-750-0 (REACH-IT List-No.) |
| CAS | --- |
| content % | 40-60 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Flam. Liq. 2, H225 |
| | Asp. Tox. 1, H304 |
| | STOT SE 3, H336 |
| | Aquatic Chronic 2, H411 |

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics
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.

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. Consult doctor immediately.
Danger of aspiration
In case of vomiting, keep head low so that the stomach content does not reach the lungs.
Immediate admittance to a hospital.

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
Coughing
Headaches
Dizziness
Fatigue
Effects/damages the central nervous system
Coordination disorders
Unconsciousness
With long-term contact:
Drying of the skin.
Dermatitis (skin inflammation)
Ingestion:
Nausea
Vomiting
Danger of aspiration
Oedema of the lungs
Chemical pneumonitis (condition similar to pneumonia)
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:
Gastric lavage (stomach washing) only under endotracheal intubation.
Pulmonary oedema prophylaxis
Subsequent observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
CO2
Extinction powder
Water jet spray
Alcohol resistant foam

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
Toxic pyrolysis products.
Danger of bursting (explosion) when heated
Explosive vapour/air or gas/air mixtures.
Dangerous vapours heavier than air.
In case of spreading near the ground, flashback to distance sources of ignition is possible.

5.3 Advice for firefighters

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

Ensure sufficient supply of air.
Remove possible causes of ignition - do not smoke.
Avoid inhalation, and contact with eyes or skin.
If applicable, caution - risk of slipping.

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 from entering drainage system. 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, sand, diatomaceous earth) and dispose of according to Section 13. Use no flammable substances. Fill the absorbed material into lockable containers.

### 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.

#### 7.1 Precautions for safe handling

##### 7.1.1 General recommendations
Ensure good ventilation.
Avoid inhalation of the vapours.
If applicable, suction measures at the workstation or on the processing machine necessary.
Keep away from sources of ignition - Do not smoke.
Take precautions against electrostatic charges.
Use explosion-proof equipment.
Avoid contact with eyes or skin.
Also seal emptied tanks and tanks in the process after they have been used.
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.
Do not store with flammable or self-igniting materials.
Observe special storage conditions.
Store in a well ventilated place.
Protect from direct sunlight and warming.
Store cool.
Store in a dry place.

#### 7.3 Specific end use(s)
No information available at present.

### 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):
1000 mg/m³

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Content %: 40-60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclcics</td>
<td></td>
</tr>
<tr>
<td>WEL-TWA: 1200 mg/m³</td>
<td>WEL-STEL: 1200 mg/m³</td>
</tr>
<tr>
<td>Monitoring procedures:</td>
<td>---</td>
</tr>
<tr>
<td>- Draeger - Hydrocarbons 2/a (81 03 581)</td>
<td>---</td>
</tr>
<tr>
<td>- Draeger - Hydrocarbons 0.1%/c (81 03 571)</td>
<td>---</td>
</tr>
<tr>
<td>- Compur - KITA-187 S (551 174)</td>
<td>---</td>
</tr>
</tbody>
</table>
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 20.08.2018 / 0011
Replacing version dated / version: 18.05.2018 / 0010
Valid from: 20.08.2018
PDF print date: 24.08.2018

1K-Nano

BMGV: ---
Other information: ---

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<thead>
<tr>
<th>Chemical Name</th>
<th>Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics</th>
<th>Content %: 40-60</th>
</tr>
</thead>
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<tr>
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<td>OELV-15min: 125 ppm (720 mg/m3) (White Spirit)</td>
<td>---</td>
</tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BLV: ---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BMGV: ---
Other information: ---

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</th>
<th>Content %: 30-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>OELV-8h: 100 ppm (573 mg/m3) (White Spirit)</td>
<td>OELV-15min: 125 ppm (720 mg/m3) (White Spirit)</td>
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<tr>
<td>BLV: ---</td>
<td></td>
<td></td>
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</tbody>
</table>

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA = time weighted average) reference period
EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).


WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).


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.

WEL-TWA = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

OELV-ST = Occupational Exposure Limit Value - Short-term (15-minute reference period)


BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany).

Other information: Skin = Possibility of a significant uptake through the skin.

When selecting an appropriate exposure monitoring method, account should be taken of potential limitations and interferences that may arise in the presence of other sulphur compounds. (S.L.424.24). [12] = The mist is defined as the thoracic fraction.
monitoring for mercury and its divalent inorganic compounds, account should be taken of relevant biological monitoring techniques that complement the OELV. (S.L.424.24)

8.2 Exposure controls

<table>
<thead>
<tr>
<th>Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics</th>
<th>Area of application</th>
<th>Exposure route / Environmental compartment</th>
<th>Effect on health</th>
<th>Descriptor</th>
<th>Value</th>
<th>Unit</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Human - dermal</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>699</td>
<td>mg/kg bw/d</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human - inhalation</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>608</td>
<td>mg/m3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers / employees</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>2035</td>
<td>mg/m3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Value</th>
<th>Unit</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consumer</td>
<td>Human - dermal</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>300</td>
<td>mg/kg bw/d</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumer</td>
<td>Human - inhalation</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>900</td>
<td>mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumer</td>
<td>Human - oral</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>300</td>
<td>mg/kg bw/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers / employees</td>
<td>Human - dermal</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>300</td>
<td>mg/kg bw/d</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers / employees</td>
<td>Human - inhalation</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>1500</td>
<td>mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

8.2.1 Appropriate engineering controls

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. BS EN 14042.
BS 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 374).
If applicable
Protective nitrile gloves (EN 374)
Minimum layer thickness in mm:
Permeation time (penetration time) in minutes:
> 480

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.

Protective Viton® / fluoroelastomer gloves (EN 374)
Minimum layer thickness in mm:
0,7

Protective hand cream recommended.

Skin protection - Other:
Solvent resistant protection clothing (EN 13034)

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 manufacturer.
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: Dispersion, Liquid
Colour: Turbid
Odour: Solvent
Odour threshold: Not determined
pH-value: n.a.
Melting point/freezing point: Not determined
Initial boiling point and boiling range: Not determined
Flash point: >1 °C
Evaporation rate: Not determined
Flammability (solid, gas): Not determined
Lower explosive limit: Not determined
Upper explosive limit: Not determined
Vapour pressure: Not determined
Vapour density (air = 1): Vapours heavier than air.
Density: 0,76-0,78 g/ml (20°C)
Bulk density: Not determined
Solubility(ies): Not determined
Water solubility: Not miscible
Partition coefficient (n-octanol/water): Not determined
Auto-ignition temperature: Not determined
Decomposition temperature: <7 mm2/s (40°C)
Viscosity: Possible build up of explosive/highly flammable vapour/air mixture. Product is not explosive.
Explosive properties: No
Oxidising properties:
9.2 Other information

Miscibility: Not determined
Fat solubility / solvent: Not determined
Conductivity: Not determined
Surface tension: Not determined
Solvents content: Not determined

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 decomposition if used as intended.

10.4 Conditions to avoid
Heating, open flame, ignition sources
Electrostatic charge

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

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, by oral route:</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
<td>Rat</td>
<td>OECD 401 (Acute Oral Toxicity)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
<td>LD50</td>
<td>5000</td>
<td>mg/kg</td>
<td>Rat</td>
<td>OECD 401 (Acute Oral Toxicity)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
<td>LD50</td>
<td>&gt;2800</td>
<td>mg/kg</td>
<td>Rabbit</td>
<td>OECD 402 (Acute Dermal Toxicity)</td>
<td></td>
</tr>
</tbody>
</table>

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

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<td>&gt;2800</td>
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<td>Rabbit</td>
<td>OECD 402 (Acute Dermal Toxicity)</td>
<td></td>
</tr>
</tbody>
</table>
### Acute toxicity, by dermal route:
- **LD50**: 2800 mg/kg Rabbit  
  OECD 402 (Acute Dermal Toxicity)

### Acute toxicity, by dermal route:
- **LD50**: >2000 mg/kg Rabbit  
  OECD 402 (Acute Dermal Toxicity)

### Acute toxicity, by inhalation:
- **LC50**: >23.3 mg/l/4h Rat  
  OECD 403 (Acute Inhalation Toxicity)  
  Vapours

### Acute toxicity, by inhalation:
- **LC50**: >23.3 mg/l/4h Rat  
  OECD 403 (Acute Inhalation Toxicity)

### Skin corrosion/irritation:
- Rabbit  
  OECD 404 (Acute Dermal Irritation/Corrosion)  
  Not irritant

### Skin corrosion/irritation:
- Repeated exposure may cause skin dryness or cracking.

### Skin corrosion/irritation:
- OECD 405 (Acute Eye Irritation/Corrosion)  
  Not irritant

### Respiratory or skin sensitisation:
- Guinea pig  
  OECD 406 (Skin Sensitisation)  
  Not sensitising

### Germ cell mutagenicity:
- OECD 473 (In Vitro Mammalian Chromosome Aberration Test)  
  Negative

### Germ cell mutagenicity:
- 2000 mg/kg Mouse  
  OECD 474 (Mammalian Erythrocyte Micronucleus Test)  
  Negative

### Reproductive toxicity:
- LOAEL 9000 ppm Rat  
  OECD 416 (Two-generation Reproduction Toxicity Study)  
  Negative

### Aspiration hazard:
- Yes

### Symptoms:
- Drowsiness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.

### Toxicity / effect
<table>
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</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td>LC50</td>
<td>&gt;54</td>
<td>mg/l/4h</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td>LD50</td>
<td>&gt;20</td>
<td>mg/l/4h</td>
<td>Rat</td>
<td></td>
</tr>
</tbody>
</table>

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**
1K-Nano

Acute toxicity, by inhalation: LC50 >4951 mg/m3/4 h Rat OECD 403 (Acute Inhalation Toxicity) Analogous conclusion, Maximum achievable concentration.

Skin corrosion/irritation: Rabbit OECD 404 (Acute Dermal Irritation/Corrosion) Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation: Rabbit OECD 405 (Acute Eye Irritation/Corrosion) Mild irritant (Analogous conclusion)

Respiratory or skin sensitisation: Guinea pig OECD 406 (Skin Sensitisation) Not sensitising (Analogous conclusion)

Respiratory or skin sensitisation: OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents) No indications of such an effect.

Germ cell mutagenicity: OECD 471 (Bacterial Reverse Mutation Test) No indications of such an effect.

Carcinogenicity: OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) No indications of such an effect.

Reproductive toxicity: OECD 414 (Prenatal Developmental Toxicity Study) No indications of such an effect.

Specific target organ toxicity - single exposure (STOT-SE): May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure (STOT-RE): OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents) No indications of such an effect.

Aspiration hazard: Yes

Symptoms: drowsiness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.

### SECTION 12: Ecological information

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

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
</table>
### 12.1. Toxicity to algae:

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td></td>
<td></td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
<tr>
<td>EB50</td>
<td>72h</td>
<td>10-30</td>
<td></td>
<td>Pseudokirchnerie lla subcapitata</td>
<td>OECD 201 (Alga, Growth Inhibition Test)</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability:

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL50</td>
<td>48h</td>
<td>4.6 - 10</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
<tr>
<td>NOELR</td>
<td>21d</td>
<td>1 - 1.8</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 211 (Daphnia magna Reproduction Test)</td>
</tr>
</tbody>
</table>

#### 12.3. Bioaccumulative potential:

- n.d.a.

#### 12.4. Mobility in soil:

- n.d.a.

#### 12.5. Results of PBT and vPvB assessment

- No PBT substance, No vPvB substance

### Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish:</td>
<td>LC50</td>
<td></td>
<td>1 - 10</td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
<tr>
<td>Toxicity to daphnia:</td>
<td>EL50</td>
<td>48h</td>
<td>4.6 - 10</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
</tbody>
</table>

### Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish:</td>
<td>LL50</td>
<td>96h</td>
<td>&gt;10-&lt;30</td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
</tr>
</tbody>
</table>

### Other information:

- According to the recipe, contains no AOX.
12.1 Toxicity to algae:

- NOELR: 72h <1 mg/l Pseudokirchnerie lla subcapitata (OECD 201)

- IC50: >100 mg/l

- EL50: >1000 mg/l Pseudokirchnerie lla subcapitata (OECD 201)

12.2 Persistence and degradability:

- Readily biodegradable

- 28d ThOD 53-55% Biodegradable

12.3 Bioaccumulative potential:

- Log Pow 4-5,7

12.4 Mobility in soil:

- Product floats on the water surface.

12.5 Results of PBT and vPvB assessment

- No PBT substance, No vPvB substance

Toxicity to bacteria:

- EC50: >1000 mg/l

Other information:

- AOX Does not contain any organically bound halogens which can contribute to the AOX value in waste water.

Water solubility:

- ~ 0,04 g/l Insoluble20°C

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.: 07 07 04 other organic solvents, washing liquids and mother liquors

Recommendation: Pay attention to local and national official regulations.

For contaminated packing material

Pay attention to local and national official regulations.

Recommendation: Pay attention to local and national official regulations.

Do not perforate, cut up or weld uncleaned container.

Residues may present a risk of explosion.
General statements

14.1. UN number: 1993

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name: UN 1993 FLAMMABLE LIQUID, N.O.S. (NAPHTHA (PETROLEUM))
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Classification code: F1
LQ: 1 L
14.5. Environmental hazards: environmentally hazardous
Tunnel restriction code: D/E

Transport by sea (IMDG-code)

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (NAPHTHA (PETROLEUM))
14.3. Transport hazard class(es): 3
14.4. Packing group: II
EmS: F-E, S-E
Marine Pollutant: Yes
14.5. Environmental hazards: environmentally hazardous

Transport by air (IATA)

14.2. UN proper shipping name: Flammable liquid, n.o.s. (NAPHTHA (PETROLEUM))
14.3. Transport hazard class(es): 3
14.4. Packing group: II
14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.
Comply with special provisions.

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 the protection of young people at work (national implementation of the Directive 94/33/EC)! 
Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

<table>
<thead>
<tr>
<th>Hazard categories</th>
<th>Notes to Annex I</th>
<th>Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements</th>
<th>Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>P5c</td>
<td></td>
<td>5000</td>
<td>50000</td>
</tr>
<tr>
<td>E2</td>
<td></td>
<td>200</td>
<td>500</td>
</tr>
</tbody>
</table>

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.
15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 8
Employee training in handling dangerous goods is required. 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):

<table>
<thead>
<tr>
<th>Classification in accordance with regulation (EC) No. 1272/2008 (CLP)</th>
<th>Evaluation method used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2, H225</td>
<td>Classification based on test data.</td>
</tr>
<tr>
<td>Asp. Tox. 1, H304</td>
<td>Classification according to calculation procedure.</td>
</tr>
<tr>
<td>STOT SE 3, H336</td>
<td>Classification according to calculation procedure.</td>
</tr>
<tr>
<td>Aquatic Chronic 2, H411</td>
<td>Classification according to calculation procedure.</td>
</tr>
</tbody>
</table>

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Flam. Liq. — Flammable liquid
Asp. Tox. — Aspiration hazard
STOT SE — Specific target organ toxicity - single exposure - narcotic effects
Aquatic Chronic — Hazardous to the aquatic environment - chronic
Skin Irrit. — Skin irritation
Eye Irrit. — Eye irritation

Any abbreviations and acronyms used in this document:

AC Article Categories
acc., acc. to according, according to
ACGIH American Conference of Governmental Industrial Hygienists
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOEL Acceptable Operator Exposure Level
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
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
BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)
BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)
BMGV Biological monitoring guidance value (EH40, UK)
BOD Biochemical oxygen demand
BSEF Bromine Science and Environmental Forum
bw body weight
CAS Chemical Abstracts Service
CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids
CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques
CIPAC Collaborative International Pesticides Analytical Council
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
COD Chemical oxygen demand
CTFA Cosmetic, Toiletry, and Fragrance Association
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon
DT50 Dwell Time - 50% reduction of start concentration
DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EC European Community
ECHA European Chemicals Agency
EEA European Economic Area
ECC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EEA European Economic Area
ES Exposure scenario
etc. et cetera
EU European Union
EWC European Waste Catalogue
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
HET-CAM Hen's Egg Test - Chorionallantoic Membrane
HGWP Halocarbon Global Warming Potential
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC Intermediate Bulk Container
IBC (Code) International Bulk Chemical (Code)
IC Inhibitory concentration
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
LC lethal concentration
LC50 lethal concentration 50 percent kill
LCLo lowest published lethal concentration
LD Lethal Dose of a chemical
LD50 Lethal Dose, 50% kill
LDLo Lethal Dose Low
LOAEL Lowest Observed Adverse Effect Level
LOEC Lowest Observed Effect Concentration
LOEL Lowest Observed Effect Level
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
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.
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