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

1.1 Product identifier
   Product name : LUB HIGH TEMP

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Use of the Substance/Mixture : Grease
   Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet
   Company : NTN-SNR ROULEMENTS
             1, rue des Usines - BP 2017
             74000 ANNECY France
             Tel : +33 (0)4 50 65 30 00
             Fax : +33 (0)4 50 65 32 91
   E-mail address of person responsible for the SDS : fds@ntn-snr.fr
   Laboratory Service NTN-SNR Roulements
   National contact :

1.4 Emergency telephone number
   Emergency telephone number : Emergency Tel. (Office hours) +33 (0)4 50 65 97 55
                                  Emergency Tel. (France) ORFILA (INRS) +33 (0)1 45 42 59 59
                                  Emergency Tel. (EU): 112 (Available 24 hours a day)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting effects.
2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements  :  H412  Harmful to aquatic life with long lasting effects.

Precautionary statements  :  Prevention:
P273  Avoid release to the environment.

Additional Labelling

EUH208  Contains 4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol. May produce an allergic reaction.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature  :  Mineral oil.
                 :  Synthetic hydrocarbon oil
                 :  Polyurea

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Classification</th>
<th>Concentration limits</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>polyurea</td>
<td>1266545-95-2</td>
<td></td>
<td></td>
<td>Aquatic Chronic4; H413</td>
<td>M-Factor: 1/1</td>
<td>&gt;= 2.5 - &lt; 10</td>
</tr>
<tr>
<td>Phenol, isopropylated, phosphate (3:1)</td>
<td>68937-41-7</td>
<td>273-066-3</td>
<td>01-2119535109-41-XXXX</td>
<td>Repr.2; H361 STOT RE2; H373 Aquatic Chronic1; H410</td>
<td>M-Factor: 1/1</td>
<td>&gt;= 1 - &lt; 2.5</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled:
- Obtain medical attention.
- Remove person to fresh air. If signs/symptoms continue, get medical attention.
- Keep patient warm and at rest.
- If unconscious, place in recovery position and seek medical advice.
- Keep respiratory tract clear.
- If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact:
- Take off all contaminated clothing immediately.
- Get medical attention immediately if irritation develops and persists.
- Wash clothing before reuse.
- Thoroughly clean shoes before reuse.
- Wash off immediately with plenty of water.

In case of eye contact:
- Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
- If eye irritation persists, consult a specialist.

If swallowed:
- Move the victim to fresh air.
- If unconscious, place in recovery position and seek medical advice.
- Keep respiratory tract clear.
- Do not induce vomiting without medical advice.
- Obtain medical attention.
- Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:
- Allergic appearance

Risks:
- May cause an allergic skin reaction.
4.3 Indication of any immediate medical attention and special treatment needed

Treatment: The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Fire may cause evolution of:
- Carbon oxides
- Nitrogen oxides (NOx)
- Oxides of phosphorus
- Sulphur oxides

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. Exposure to decomposition products may be a hazard to health.

Further information: Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Evacuate personnel to safe areas.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Avoid breathing dust.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions: Do not allow contact with soil, surface or ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Avoid contact with skin and eyes. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Wash hands and face before breaks and immediately after handling the product. Do not get in eyes or mouth or on skin. Do not get on skin or clothing. Do not ingest. Do not repack. These safety instructions also apply to empty packaging which may still contain product residues. Keep container closed when not in use.

Hygiene measures: Wash face, hands and any exposed skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Store in original container. Keep container closed when not in use. Keep in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Keep in properly labelled containers.

Storage class (TRGS 510): 11, Combustible Solids

7.3 Specific end use(s)

Specific use(s): Specific instructions for handling, not required.
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

**Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol, isopropylated, phosphate (3:1)</td>
<td>68937-41-7</td>
<td>AGW (Inhalable fraction)</td>
<td>1 mg/m³</td>
<td>DE TRGS 900 (2016-11-04)</td>
</tr>
<tr>
<td>Peak-limit: excursion factor (category)</td>
<td>2:(II)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual oils (petroleum), hydrotreated: Baseoil - unspecified</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>2,7 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>Acute systemic effects</td>
<td>5,6 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>1 mg/kg</td>
</tr>
<tr>
<td>O,O,O-triphenyl phosphorothioate</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>1,39 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>0,4 mg/kg</td>
</tr>
<tr>
<td>Phenol, isopropylated, phosphate (3:1)</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>0,145 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>Acute systemic effects</td>
<td>700 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>0,416 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Acute systemic effects</td>
<td>2000 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Acute local effects</td>
<td>16 mg/cm²</td>
</tr>
<tr>
<td>triphenyl phosphate</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>5,2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>5,55 mg/kg bw/day</td>
</tr>
</tbody>
</table>

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>O,O,O-triphenyl phosphorothioate</td>
<td>Sewage treatment plant</td>
<td>1 mg/l</td>
</tr>
</tbody>
</table>
### Exposure controls

**Engineering measures**

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

**Personal protective equipment**

**Eye protection**

- Tightly fitting safety goggles

**Hand protection**

- **Material**: Nitrile rubber
- **Protective index**: Class 1

**Remarks**

- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The breakthrough time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

**Respiratory protection**

- Not required; except in case of aerosol formation.

**Filter type**

- Filter type P

**Protective measures**

- The type of protective equipment must be selected according to the concentration and amount of the dangerous substance.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace.

**SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

- **Appearance**: paste
- **Colour**: brown
- **Odour**: characteristic
- **Odour Threshold**: No data available
- **pH**: No data available
- **Melting point/range**: No data available
- **Boiling point/boiling range**: No data available
- **Flash point**: Not applicable
- **Evaporation rate**: No data available
- **Flammability (solid, gas)**: Combustible Solids
- **Upper explosion limit**: No data available
- **Lower explosion limit**: No data available
- **Vapour pressure**: < 0,001 hPa (20 °C)
- **Relative vapour density**: No data available
- **Density**: 0,90 g/cm³ (20 °C)
- **Bulk density**: No data available
- **Solubility(ies)**
  - **Water solubility**: insoluble
  - **Solubility in other solvents**: No data available
  - **Partition coefficient: n-** : No data available
octanol/water
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity
  Viscosity, dynamic : No data available
  Viscosity, kinematic : No data available
Explosive properties : Not explosive
Oxidizing properties : No data available

9.2 Other information
Sublimation point : No data available
Self-ignition : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No hazards to be specially mentioned.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid
Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials
Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products
No decomposition if stored and applied as directed.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

**Product:**
- Acute oral toxicity: Remarks: This information is not available.
- Acute inhalation toxicity: Remarks: This information is not available.
- Acute dermal toxicity: Symptoms: Redness, Local irritation

**Components:**

**polyurea:**
- Acute oral toxicity: LD50 (Rat): > 2.000 mg/kg
  Method: OECD Test Guideline 423
  GLP: yes
  Assessment: The substance or mixture has no acute oral toxicity
- Acute dermal toxicity: LD50 (Rat): > 2.000 mg/kg
  Method: OECD Test Guideline 402
  Assessment: The substance or mixture has no acute dermal toxicity

**Phenol, isopropylated, phosphate (3:1):**
- Acute oral toxicity: LD50 (Rat): > 5.000 mg/kg
- Acute inhalation toxicity: LC50 (Rat): > 200 mg/l
  Exposure time: 1 h
  Test atmosphere: dust/mist
- Acute dermal toxicity: LD50 (Rabbit): > 10.000 mg/kg
  GLP: no

**triphenyl phosphate:**
- Acute oral toxicity: LD50 (Rat): > 20.000 mg/kg
  Method: OECD Test Guideline 401
- Acute inhalation toxicity: LC50 (Rat): > 200 mg/l
  Exposure time: 1 h
  Test atmosphere: dust/mist
  Method: OECD Test Guideline 403
  Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity: LD50 (Rabbit): > 10.000 mg/kg
  Method: OECD Test Guideline 402
Skin corrosion/irritation

**Product:**
Remarks: This information is not available.

**Components:**

**polyurea:**
Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes

**Phenol, isopropylated, phosphate (3:1):**
Species: Rabbit
Exposure time: 72 h
Assessment: No skin irritation
Result: No skin irritation
GLP: no

**4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:**
Assessment: No skin irritation
Result: No skin irritation

**triphenyl phosphate:**
Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes

Serious eye damage/eye irritation

**Product:**
Remarks: This information is not available.

**Components:**

**polyurea:**
Species: Rabbit
Assessment: No eye irritation
Method: OECD Test Guideline 405
Result: No eye irritation
GLP: yes

**Phenol, isopropylated, phosphate (3:1):**
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006 - GB

LUB HIGH TEMP

Version 2.0  Revision Date: 07.02.2019

Species: Rabbit
Assessment: No eye irritation
Result: No eye irritation
GLP: no

4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:
Assessment: No eye irritation
Result: No eye irritation

triphenyl phosphate:
Species: Rabbit
Assessment: No eye irritation
Method: OECD Test Guideline 405
Result: No eye irritation
GLP: yes

Respiratory or skin sensitisation

Product:
Remarks: This information is not available.

Components:

polyurea:
Test Type: Maximisation Test
Species: Guinea pig
Assessment: Does not cause skin sensitisation.
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
GLP: yes

Phenol, isopropylated, phosphate (3:1):
Species: Mouse
Assessment: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 429
Result: Did not cause sensitisation on laboratory animals.
GLP: yes

4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:
Assessment: May cause sensitisation by skin contact.
Result: May cause sensitisation by skin contact.

triphenyl phosphate:
Species: Guinea pig
Assessment: Does not cause skin sensitisation.
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
GLP: yes
**Germ cell mutagenicity**

**Product:**
- Genotoxicity in vitro: Remarks: No data available
- Genotoxicity in vivo: Remarks: No data available

**Components:**

**polyurea:**
- Genotoxicity in vitro: Test Type: Ames test
  - Species: Salmonella typhimurium
  - Method: OECD Test Guideline 471
  - Result: negative
- Test Type: Chromosome aberration test in vitro
  - Species: Chinese hamster cells
  - Method: OECD Test Guideline 473
  - Result: negative
  - Germ cell mutagenicity - Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**triphenyl phosphate:**
- Genotoxicity in vitro: Test Type: reverse mutation assay
  - Species: Salmonella typhimurium
  - Metabolic activation: with and without metabolic activation
  - Method: OECD Test Guideline 471
  - Result: negative
  - Germ cell mutagenicity - Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**Carcinogenicity**

**Product:**
- Remarks: No data available

**Components:**

**triphenyl phosphate:**
- Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

**Reproductive toxicity**

**Product:**
**Effects on fertility**: Remarks: No data available

**Effects on foetal development**: Remarks: No data available

**Components:**

**Phenol, isopropylated, phosphate (3:1):**

Reproductive toxicity - Assessment: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments. Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

**triphenyl phosphate:**

Effects on foetal development: Species: Rabbit

Application Route: Oral

General Toxicity Maternal: NOAEL: >= 200 mg/kg body weight

Teratogenicity: NOAEL: >= 200 mg/kg body weight

Developmental Toxicity: NOAEL: >= 200 mg/kg body weight

Embryo-foetal toxicity: NOAEL: >= 200 mg/kg body weight

Method: OECD Test Guideline 414

Result: No effects on fertility and early embryonic development were detected.

Reproductive toxicity - Assessment: No toxicity to reproduction

No effects on or via lactation

**STOT - single exposure**

**Components:**

**polyurea:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

**4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

**STOT - repeated exposure**

**Components:**

**polyurea:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Phenol, isopropylated, phosphate (3:1):**

Exposure routes: Ingestion
Target Organs: ovaries, Testes, Liver, Adrenal gland
Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Product:
Remarks: This information is not available.

Components:

polyurea:
Species: Rat
NOAEL: 1.000 mg/kg
Application Route: Oral
Method: OECD Test Guideline 407

triphenyl phosphate:
Species: Rat
NOAEL: 105 mg/kg
Application Route: Oral
Method: OECD Test Guideline 408

Species: Rabbit
NOAEL: 1.000 mg/kg
Application Route: Dermal

Aspiration toxicity

Product:
This information is not available.

Components:

polyurea:
No aspiration toxicity classification

Phenol, isopropylated, phosphate (3:1):
No aspiration toxicity classification

4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:
No aspiration toxicity classification
SECTION 12: Ecological information

12.1 Toxicity

Product:
- Toxicity to fish: Remarks: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Toxicity to daphnia and other aquatic invertebrates: Remarks: No data available
- Toxicity to algae: Remarks: No data available
- Toxicity to microorganisms: Remarks: No data available

Components:
- polyurea:
  - Toxicity to fish: LC50 (Danio rerio (zebra fish)): > 100 mg/l
    Exposure time: 96 h
    Test Type: static test
    Method: OECD Test Guideline 203
    GLP: yes
  - Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): > 100 mg/l
    Exposure time: 48 h
    Test Type: static test
    Method: OECD Test Guideline 202
    GLP: yes
  - Toxicity to algae: EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
    Exposure time: 72 h
    Test Type: static test
    Method: OECD Test Guideline 201
    GLP: yes
  - Toxicity to microorganisms: EC50 (activated sludge): > 1.000 mg/l
    Exposure time: 3 h

Further information

Product:
Remarks: Information given is based on data on the components and the toxicology of similar products.
Test Type: Respiration inhibition  
Method: OECD Test Guideline 209  
GLP: yes

**Phenol, isopropylated, phosphate (3:1):**

**Toxicity to fish**
- LC50 (Oncorhynchus mykiss (rainbow trout)): 1,6 mg/l  
- Exposure time: 96 h  
- Test Type: static test  
- Remarks: Information given is based on tests on the mixture itself.

**Toxicity to daphnia and other aquatic invertebrates**
- EC50 (Daphnia magna (Water flea)): 2,44 mg/l  
- Exposure time: 48 h  
- Test Type: semi-static test  
- Remarks: Information given is based on tests on the mixture itself.

**Toxicity to algae**
- EC50 (Pseudokirchneriella subcapitata (green algae)): > 2,5 mg/l  
- Exposure time: 96 h  
- Test Type: static test  
- Method: OECD Test Guideline 201  
- GLP: yes  
- Remarks: Information given is based on tests on the mixture itself.

**M-Factor (Acute aquatic toxicity)**
- 1

**Toxicity to fish (Chronic toxicity)**
- NOEC: 0,0031 mg/l  
- Exposure time: 33 d  
- Species: Pimephales promelas (fathead minnow)  
- Method: OECD Test Guideline 210

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**
- NOEC: 0,0415 mg/l  
- Exposure time: 21 d  
- Species: Daphnia magna (Water flea)  
- Method: OECD Test Guideline 211

**M-Factor (Chronic aquatic toxicity)**
- 1

**triphenyl phosphate:**

**Toxicity to fish**
- LC50 (Oncorhynchus mykiss (rainbow trout)): 0,4 mg/l  
- Exposure time: 96 h

**Toxicity to daphnia and other aquatic invertebrates**
- EC50 (Daphnia magna (Water flea)): 0,36 mg/l  
- Exposure time: 48 h  
- Test Type: static test

**Toxicity to algae**
- NOEC (Pseudokirchneriella subcapitata (green algae)): 0,25
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mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

EL10 (Pseudokirchneriella subcapitata (green algae)): 0,25 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : NOEC (activated sludge): 100 mg/l
Exposure time: 28 h

Toxicity to fish (Chronic toxicity) : NOEC: 0,037 mg/l
Exposure time: 30 d
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

Toxicity to microorganisms : NOEC: 0,254 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

12.2 Persistence and degradability.

Product:
Biodegradability : Remarks: No data available
Physico-chemical removability : Remarks: No data available

Components:
polyurea:
Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: Not readily biodegradable.
Biodegradation: 23,9 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: yes

Phenol, isopropylated, phosphate (3:1):
Biodegradability : Result: Not rapidly biodegradable
Biodegradation: 17,9 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes

**triphenyl phosphate:**

**Biodegradability:**
- Test Type: aerobic
- Inoculum: activated sludge
- Result: Readily biodegradable.
- Biodegradation: 83 - 94 %
- Exposure time: 28 d
- Method: OECD Test Guideline 301C

**12.3 Bioaccumulative potential**

**Product:**

**Bioaccumulation**
- Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

**Components:**

**polyurea:**
- Partition coefficient: n-octanol/water
  - log Pow: > 6 (20 °C)
  - Method: OECD Test Guideline 117

**Phenol, isopropylated, phosphate (3:1):**
- Partition coefficient: n-octanol/water
  - log Pow: 4,92 - 5,17 (25 °C)

**triphenyl phosphate:**
- Species: Oryzias latipes (Orange-red killifish)
  - Exposure time: 18 d
  - Concentration: 0,01 mg/l
  - Bioconcentration factor (BCF): 144
- Bioaccumulation
  - log Pow: 4,6 (20 °C)

**12.4 Mobility in soil**

**Product:**

**Mobility**
- Remarks: No data available

**Distribution among environmental compartments**
- Remarks: No data available

**12.5 Results of PBT and vPvB assessment**

**Product:**
Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:
Phenol, isopropylated, phosphate (3:1):

4-ethyl-2-(8-heptadecenyl)-2-oxazoline-4-methanol:

12.6 Other adverse effects

Product:
Additional ecological information : Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product : The product should not be allowed to enter drains, water courses or the soil. Do not dispose of with domestic refuse. Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product. Dispose of waste product or used containers according to local regulations.

The following Waste Codes are only suggestions:

SECTION 14: Transport information

14.1 UN number
ADR : Not regulated as a dangerous good
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according to Regulation (EC) No. 1907/2006 - GB

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IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.2 UN proper shipping name
ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)
ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group
ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards
ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good

14.6 Special precautions for user
No special precautions required.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that dep- : Not applicable
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**Irritation to the ozone layer**

Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Not applicable


**Water contaminating class**

(Water contaminating class (Germany): WGK 2 significantly water endangering Classification according to AwSV, Annex 1 (5.2)

**TA Luft List (Germany)**

Total dust:
- others: 9.41 %

Inorganic substances in powdered form:
- Not applicable

Inorganic substances in vapour or gaseous form:
- Not applicable

Organic Substances:
- portion Class 1: 1.69 %
- others: 88.9 %

Carcinogenic substances:
- Not applicable

Mutagenic:
- Not applicable

Toxic to reproduction:
- Not applicable

**Volatile organic compounds**

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

Volatile organic compounds (VOC) content: 1.68 %

Remarks: VOC content excluding water

**15.2 Chemical safety assessment**

This information is not available.
SECTION 16: Other information

Full text of H-Statements

H317 : May cause an allergic skin reaction. 
H361 : Suspected of damaging fertility or the unborn child. 
H373 : May cause damage to organs through prolonged or repeated exposure if swallowed. 
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. 
H413 : May cause long lasting harmful effects to aquatic life. 

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information
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