SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

<table>
<thead>
<tr>
<th>Trade name</th>
<th>MARLOTHERM® LH</th>
</tr>
</thead>
<tbody>
<tr>
<td>REACH No.</td>
<td>01-2119488215-34-0001</td>
</tr>
<tr>
<td>Substance name</td>
<td>Benzyltoluene</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Use</th>
<th>Industrial use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>heat transfer medium</td>
</tr>
</tbody>
</table>

1.3 Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Company</th>
<th>SASOL Germany GmbH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anckelmannsplatz 1</td>
</tr>
<tr>
<td></td>
<td>20537 Hamburg</td>
</tr>
<tr>
<td>Telephone</td>
<td>+49 40 63684-1000</td>
</tr>
<tr>
<td>Telefax</td>
<td>+49 40 63684-3700</td>
</tr>
<tr>
<td>Information</td>
<td>Telephone: + 49 (0) 23 65 - 49 47 05</td>
</tr>
<tr>
<td></td>
<td>Telefax: + 49 (0) 23 65 - 49 92 40</td>
</tr>
<tr>
<td>E-mail address</td>
<td><a href="mailto:msds-info.germany@de.sasol.com">msds-info.germany@de.sasol.com</a></td>
</tr>
</tbody>
</table>

1.4 Emergency telephone number

| Emergency telephone number | + 49 (0) 23 65 - 49 22 32 |

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin irritation Category 2</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Chronic aquatic toxicity Category 4</td>
<td>May cause long lasting harmful effects to aquatic life.</td>
</tr>
<tr>
<td>Aspiration hazard Category 1</td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
</tbody>
</table>

2.2 Label elements

<table>
<thead>
<tr>
<th>Labelling (REGULATION (EC) No 1272/2008)</th>
<th>Hazard pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal word</td>
<td>Danger</td>
</tr>
</tbody>
</table>
**Hazard statements**

H304  May be fatal if swallowed and enters airways.
H315  Causes skin irritation.
H413  May cause long lasting harmful effects to aquatic life.

**Precautionary statements**

P280  Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310  IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P331  Do NOT induce vomiting.
P302 + P352  IF ON SKIN: Wash with plenty of soap and water.
P332 + P313  If skin irritation occurs: Get medical advice/ attention.
P501  Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Other hazards

During the use at elevated temperatures thermal decomposition leads to the formation of low-boiling and high-boiling secondary products (e.g. hydrocarbons).

See also section 7.1 in this Safety Data Sheet

---

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a substance in the meaning of regulation (EC) 1907/2006.

**CHEMICAL CHARACTERIZATION**

**Benzytoluene**

- **component type:** Active ingredient
  - **EC-No.:** 248-654-8
  - **Index-No.:**
  - **CAS-No.:** 27776-01-8
  - **REACH No.:** 01-2119488215-34-0001
  - **Substance name (REACH / CLP):** 248-654-8

**COMPONENTS TO BE NAMED IN ACCORDANCE WITH REGULATION (EC) 1907/2006 AS WELL AS OTHER HAZARDOUS INGREDIENTS AND CONTAINED SUBSTANCES WITH WORK PLACE LIMIT VALUES**

**Benzytoluene**

- **content:** <= 100 %
  - **component type:** Active ingredient
  - **EC-No.:** 248-654-8
  - **Index-No.:**
  - **CAS-No.:** 27776-01-8
  - **REACH No.:** 01-2119488215-34-0001
  - **Substance name (REACH / CLP):** 248-654-8
  - **Classification (Regulation (EC) No 1272/2008):**
    - **Skin Irrit.:** 2  H315
    - **Aquatic Chronic:** 4  H413
    - **Asp. Tox.:** 1  H304

**Dibenzytoluene**

- **content:** => 1 - < 2.5 %
  - **component type:** Impurity
  - **EC-No.:** 248-097-0
  - **Index-No.:**
  - **CAS-No.:** 26998-17-9
  - **Classification (Regulation (EC) No 1272/2008):**
    - **Aquatic Chronic:** 4  H413
    - **Asp. Tox.:** 1  H304
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

**General advice**
Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible).

**If inhaled**
Move to fresh air in case of accidental inhalation of vapours. Consult a physician after significant exposure.

**In case of skin contact**
Wash off immediately with plenty of water. Consult a physician.

**In case of eye contact**
Immediately flush eye(s) with plenty of water.

**If swallowed**
Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

**Symptoms**
No information available.

**Risks**
No information available.

4.3 Indication of any immediate medical attention and special treatment needed

**Treatment**
Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

**Suitable extinguishing media**
Water spray, Dry powder, Foam, Carbon dioxide (CO2)

**Unsuitable extinguishing media**
High volume water jet

5.2 Special hazards arising from the substance or mixture

**Specific hazards during firefighting**
Dangerous gases or fumes may occur in case of fire.

5.3 Advice for firefighters

**Special protective equipment for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**
Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

**Personal precautions**
Handle in accordance with good industrial hygiene and safety practice. Use
personal protective equipment. Do not breathe vapours or spray mist.

**Special precautions**

Danger of slipping after spill or leakage. Spilling onto the container's outside will make container slippery.

**6.2 Environmental precautions**

Environmental precautions

Avoid subsoil penetration.

Do not flush into surface water or sanitary sewer system.

**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use mechanical handling equipment. The material taken up must be disposed of in accordance with regulations. If they get dirty, clean using a surfactant solution. Do not allow washing water to get into the environment. Dispose of it instead via the drains.

**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**

Follow advice in the 'Marlotherm® Heat Transfer Fluids' product brochure and in DIN 4754 (heat transfer systems using organic heat transfer fluids). During the use at elevated temperatures thermal decomposition leads to the formation of low-boiling and high-boiling secondary products. During removal of low boiling decomposition products with potential highly flammable properties from the system, appropriate risk management measures for flammable liquids have to be applied – especially when they are concentrated and collected.

Risk management measurements for flammable liquids are at least: Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting/equipment. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Wear protective gloves/protective clothing/eye protection/face protection.

**Advice on protection against fire and explosion**

Normal measures for preventive fire protection.

Spontaneous combustion can occur should the product come into contact with hot fibre glass or mineral fibre insulations (e.g. in case of leakages), especially when exposed to atmospheric oxygen (e.g. removal of insulation panels). The use of foam glass as an insulating material can reduce the risk of such spontaneous combustion.

Insulation material soaked with the product must be replaced with new insulation material as soon as possible.

**Fire-fighting class**

B: Fires involving liquids or liquid containing substances. Also includes substances which become liquid at elevated temperatures.

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

**Requirements for storage areas and containers**

Keep container tightly closed.

**Storage class (TRGS 510)**

10: Combustible liquids not in Storage Class 3

**Other data**

Stable at normal ambient temperature and pressure.

**Container material**

suitable materials: Steel, Stainless steel
7.3 Specific end use(s)
   Specific use(s)  This information is not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

<table>
<thead>
<tr>
<th>National occupational exposure limits</th>
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DERIVED NO EFFECT LEVEL (DNEL)

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</tr>
<tr>
<td>Workers</td>
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</tr>
<tr>
<td>Consumers</td>
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</tbody>
</table>
Substance name: 248-654-8

<table>
<thead>
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<th>Exposure routes</th>
<th>Value</th>
<th>Note</th>
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</thead>
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</tr>
<tr>
<td></td>
<td>Inhalation, Acute/short-term exposure - systemic effects</td>
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</tr>
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<tr>
<td></td>
<td>Inhalation, Acute/short-term exposure - local effects</td>
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</tr>
<tr>
<td></td>
<td>dermal, long-term exposure - systemic effects</td>
<td>0.5 mg/kg</td>
<td>based on body weight and day</td>
</tr>
<tr>
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<td>Inhalation, long-term exposure - systemic effects</td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Inhalation, long-term exposure - local effects</td>
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<td>Not relevant / not applicable</td>
</tr>
<tr>
<td>Consumers</td>
<td>dermal, Acute/short-term exposure - systemic effects</td>
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<tr>
<td></td>
<td>Inhalation, Acute/short-term exposure - systemic effects</td>
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<td>Inhalation, Acute/short-term exposure - local effects</td>
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<td>dermal, long-term exposure - local effects</td>
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</tr>
<tr>
<td></td>
<td>Inhalation, long-term exposure - local effects</td>
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<td>Not relevant / not applicable</td>
</tr>
</tbody>
</table>
PREDICTED NO EFFECT CONCENTRATION (PNEC)

<table>
<thead>
<tr>
<th>Substance name: dibenzyltoluene</th>
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</thead>
<tbody>
<tr>
<td><strong>Environmental Compartment</strong></td>
</tr>
<tr>
<td>Fresh water</td>
</tr>
<tr>
<td>Marine water</td>
</tr>
<tr>
<td>intermittent release</td>
</tr>
<tr>
<td>treatment plant</td>
</tr>
<tr>
<td>Fresh water sediment</td>
</tr>
<tr>
<td>Marine sediment</td>
</tr>
<tr>
<td>Soil</td>
</tr>
<tr>
<td>food</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance name: 248-654-8</th>
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</thead>
<tbody>
<tr>
<td><strong>Environmental Compartment</strong></td>
</tr>
<tr>
<td>Fresh water</td>
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<tr>
<td>Marine water</td>
</tr>
<tr>
<td>intermittent release</td>
</tr>
<tr>
<td>treatment plant</td>
</tr>
<tr>
<td>Fresh water sediment</td>
</tr>
<tr>
<td>Marine sediment</td>
</tr>
<tr>
<td>Soil</td>
</tr>
<tr>
<td>food</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

**PERSONAL PROTECTIVE EQUIPMENT**

**Respiratory protection**
No personal respiratory protective equipment normally required. In inadequately ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or ABEK-P2), in compliance with EN 141.

**Hand protection**
The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the breakthrough time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

**gloves suitable for permanent contact:**
- **Material:** Fluorinated rubber
- **Breakthrough time:** >= 480 min
- **Layer thickness:** 0.4 mm
Eye protection
Tightly fitting safety goggles

Skin and body protection
Protective suit

Hygiene measures
General industrial hygiene practice. Handle in accordance with good industrial hygiene and safety practice.

Protective measures
Avoid contact with the skin and the eyes. Wear suitable gloves and eye/face protection.

ENVIRONMENTAL EXPOSURE CONTROLS
General advice
Avoid subsoil penetration.
Do not flush into surface water or sanitary sewer system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state
liquid; 20 °C; 1,013 hPa

Form
liquid

Colour
colourless

Odour
very faint

Odour Threshold
No data available

pH
Not applicable

Melting point/range
-80 - -70 °C; 1,013 hPa; OECD Test Guideline 102

Boiling point/boiling range
280 - 290 °C; 1,013 hPa; DIN 53171

Flash point
c.a. 137 °C; Regulation (EC) No 440/2008; Method A.9.

Evaporation rate
No data available

Flammability (solid, gas)
not applicable (liquid)

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
< 0.01 hPa; 20 °C; OECD Test Guideline 104

Relative vapour density
No data available

Density
0.995 g/cm3; 20 °C; OECD Test Guideline 109

Relative density
No data available

Bulk density
Not applicable

Water solubility
c.a. < 0.1 mg/l; 20 °C; Regulation (EC) No 440/2008; Method A.6.

Partition coefficient: n-octanol/water
log Pow: 4.3 - 4.4; 20 °C; pH: ca. 7; OECD Test Guideline 107

Ignition temperature
c.a. 510 °C; 990 hPa; Regulation (EC) No 440/2008; Method A.15.

Auto-ignition temperature
not auto-flammable

Viscosity, kinematic
c.a. 4.0 mm2/s; 20 °C; DIN 51562
Explosive properties
not expected based on structure and functional groups

Oxidizing properties
not expected based on structure and functional groups

9.2 Other data
None known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Note
Stable at normal ambient temperature and pressure.

10.2 Chemical stability
Note
No decomposition if stored normally. Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions
Heating can release hazardous gases.
Vapours may form explosive mixture with air.

10.4 Conditions to avoid
Conditions to avoid
Direct heating, dirt, chemical contamination, sunlight, UV or ionising radiation.
Extremes of temperature and direct sunlight.

10.5 Incompatible materials to avoid
Materials to avoid
Strong oxidizing agents;

10.6 Hazardous decomposition products
Thermal decomposition
During the use at elevated temperatures thermal decomposition leads to the formation of low-boiling and high-boiling secondary products (e.g. hydrocarbons). See also section 7.1 in this Safety Data Sheet

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
Acute oral toxicity
LD50 Rat: > 2,000 mg/kg (literature value)
Based on available data, the classification criteria are not met.

Acute inhalation toxicity
LC50 Rat: > 1.88 mg/l; 4 h; OECD Test Guideline 403 (literature value)
Based on available data, the classification criteria are not met.

Acute dermal toxicity
LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 402
Based on available data, the classification criteria are not met.

Skin corrosion/irritation
Skin irritation
Rabbit: irritating; OECD Test Guideline 404
Causes skin irritation.

**Serious eye damage/eye irritation**

**Eye irritation**

Rabbit: slightly irritating; OECD Test Guideline 405
Based on available data, the classification criteria are not met.

**Respiratory or skin sensitisation**

**Sensitisation**

Buehler Test Guinea pig: not sensitizing; OECD Test Guideline 406
Based on available data, the classification criteria are not met.

**Germ cell mutagenicity**

**Genotoxicity in vitro**

In vitro tests did not show mutagenic effects

**Genotoxicity in vivo**

In vivo tests did not show mutagenic effects

**Remarks**

Based on available data, the classification criteria are not met.

**Carcinogenicity**

**Carcinogenicity**

The study is not necessary.

**Justification:**

Not expected to have a wide dispersive use and there is no evidence of frequent or long-term human exposure.

The substance has been shown to be not genotoxic, therefore it is not expected to have a carcinogenic potential.

**Reproductive toxicity**

**Reproductive toxicity**

Rat; Oral

NOAEL ((parents)): 120 mg/kg (based on body weight and day)

NOAEL (F1): 750 mg/kg (based on body weight and day); OECD Test Guideline 415

The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Test substance: Dibenzyltoluene

**Remarks**

Based on available data, the classification criteria are not met.

**Teratogenicity**

Rat; Oral

NOAEL: 150 mg/kg (based on body weight and day)

NOAEL (pregnant female): 150 mg/kg (based on body weight and day); OECD Test Guideline 414

The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Test substance: Dibenzyltoluene

**Remarks**

Based on available data, the classification criteria are not met.

**STOT - single exposure**

**Remarks**

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

**STOT - repeated exposure**

**Remarks**

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

**Repeated dose toxicity**

Rat; Oral

NOAEL: 50 mg/kg (based on body weight and day); OECD Test Guideline 408

Target Organs: Liver (literature value)

**Aspiration hazard**
Aspiration toxicity
May be fatal if swallowed and enters airways.

Further information
Toxicological information
Absorption through gut is possible.
The substance is metabolised.
Bioaccumulation is unlikely.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish
(96 h) Danio rerio (zebra fish) ; semi-static test; OECD Test Guideline 203
In the range of water solubility not toxic under test conditions.

Toxicity to fish - Chronic toxicity
The study is not necessary.
Justification:
exposure considerations

Toxicity to daphnia and other aquatic invertebrates
(48 h) Daphnia magna (Water flea) ; static test; Directive 84/449/EEC, C.2
In the range of water solubility not toxic under test conditions.

Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity
The study is not necessary.
Justification:
Sufficient information is available to predict no toxicity at the limit of solubility.

Toxicity to aquatic plants
(72 h) Pseudokirchneriella subcapitata (microalgae) ; static test; OECD Test Guideline 201;
In the range of water solubility not toxic under test conditions.

Toxicity to bacteria
EC10 (5 h) Pseudomonas putida: > 990 mg/l; Respiration inhibition; oxygen consumption test

Toxicity to soil dwelling organisms
LC50 (14 d) Eisenia fetida (earthworms): 168.5 mg/kg; mortality; artificial soil
(literature value)

Toxicity to terrestrial flora
emergence, growth; EC50 (20 d): > 100 mg/kg; emergence, growth; Raphanus sativus,
Trifolium ornithopodioides, Triticum aestivum; OECD Test Guideline 208

Toxicity for other terrestrial non-mammalian fauna
The study is not necessary.
Justification:
Studies on birds do not need to be conducted due to large mammalian dataset.

12.2 Persistence and degradability
Biodegradability
inherently biodegradable; < 60 %; aerobic; OECD Test Guideline 301B

12.3 Bioaccumulative potential
Bioaccumulation
Bioconcentration factor (BCF): 344; calculated
(literature value)
Does not significantly accumulate in organisms.

12.4 Mobility in soil
Mobility
Adsorption/Soil; Medium: Soil; log Koc: 3.561 - 3.689; OECD Test Guideline 121
Slightly mobile in soils

12.5 Results of PBT and vPvB assessment
Results of PBT 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.

12.6 Other adverse effects
General advice  
May cause long lasting harmful effects to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- **Product**: Can be incinerated, when in compliance with local regulations.
- **Contaminated packaging**: Contaminated packaging should be emptied optimally and after being suitably cleaned returned for re-use.
- **Waste code of the European Union: EWC**: A waste code in accordance with the European Waste Catalogue (EWC) may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose. The waste code must be determined in agreement with the regional waste disposal authority or company.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

- **ADR**: Not dangerous goods
- **RID**: Not dangerous goods
- **ADN**: Not dangerous goods
- **IMDG**: Not dangerous goods
- **ICAO/IATA**: Not dangerous goods

14.2 Proper shipping name

- **ADR**: Not dangerous goods
- **RID**: Not dangerous goods
- **ADN**: Not dangerous goods
- **IMDG**: Not dangerous goods
- **ICAO/IATA**: Not dangerous goods

14.3 Transport hazard class

- **ADR**: Not dangerous goods
- **RID**: Not dangerous goods
- **ADN**: Not dangerous goods
- **IMDG**: Not dangerous goods
- **ICAO/IATA**: Not dangerous goods

14.4 Packing group

- **ADR**: Not dangerous goods
- **RID**: Not dangerous goods
- **ADN**: Not dangerous goods
- **IMDG**: Not dangerous goods
- **ICAO/IATA**: Not dangerous goods

14.5 Environmental hazards
14.6 Special precautions for user
Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Remarks No information available.

SECTION 15: REGULATORY INFORMATION

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

Occupational restrictions Employment restrictions for children and young workers in accordance with Directive 94/33/EC and the respective national provisions are to be observed.

NATIONAL/OTHER REGULATIONS

NOTIFICATION STATUS

<table>
<thead>
<tr>
<th>Country</th>
<th>Inventory or Registry Name</th>
<th>Notification Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>US. Toxic Substances Control Act</td>
<td>TSCA</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Canada. Canadian Environmental Protection Act (CEPA), Domestic Substances List (DSL)</td>
<td>DSL</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Australia. Industrial Chemical (Notification and Assessment) Act</td>
<td>AICS</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand</td>
<td>NZIOC</td>
<td>n (Negative listing)</td>
</tr>
<tr>
<td>Japan. Kashin-Hou Law List</td>
<td>ENCS (JP)</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Japan. Industrial Safety &amp; Health Law (ISHL) List</td>
<td>ISHL (JP)</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Korea. Existing Chemicals Inventory (KECI)</td>
<td>KECI (KR)</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act</td>
<td>PICCS (PH)</td>
<td>n (Negative listing)</td>
</tr>
<tr>
<td>China. Inventory of Existing Chemical Substances</td>
<td>INV (CN)</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Switzerland. Consolidated Inventory</td>
<td>CH INV</td>
<td>y (positive listing)</td>
</tr>
</tbody>
</table>

Please note: the names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in chapter 3.

15.2 Chemical Safety Assessment
A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H413 May cause long lasting harmful effects to aquatic life.

Safety datasheet sections which have been updated:

1. Identification of the substance/mixture and of the company/undertaking
2. Hazards identification
3. Composition/information on ingredients
7. Handling and storage
15. Regulatory information

Further information: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Key or legend to abbreviations and acronyms used in the safety data sheet

ADN Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route
AICS Australian Inventory of Chemical Substances
ANSI American National Standards Institute
ASTM American Society of Testing and Materials (US)
BCF Bioconcentration factor
CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures
DIN Deutsches Institut für Normung
DNEL Derived No-Effect Level
DSL Domestic Substances List
EC... Effet concentration ... %
ENCS Existing Notified Chemical Substances (Japan)
EWC European Waste Catalogue
IATA International Air Transport Association
IBC Intermediate Bulk Container
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization
ISHL Industrial Safety and Health Law (Japan)
ISO International Organization for Standardization
IUAPC International Union of Pure and Applied Chemistry
KECI Korea Existing Chemicals Inventory
LC... Lethal Concentration, ... %
LD... Lethal Dose, ... %
MARPOL International Convention for the Prevention of Pollution From Ships
NDSSL Non-Domestic Substances List
NOAEL no observable adverse effect level
NOEL/NOEC No Observed-effect level/concentration
NZIoC New Zealand Inventory of Chemicals
OECD Organisation for Economic Co-operation and Development
Annex

Attachments to the safety data sheet and/or lists of the identified uses for the listed substances can be downloaded using the internet links below.

248-654-8