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

1.1. Product identifier

Product form: Substance
Physical state: Liquid
Substance name: 4-VINYL-1,2-EPOXYCYCLOHEXENE
Product code: ENEV4540
Formula: C₈H₁₂O
Synonyms: 1,2-EPOXY-4-VINYLCYCLOHEXANE; 7-OXABICYCLO(4.1.0)HEPTANE; 3-VINYL-1-VINYL-3,4-EPOXYCYCLOHEXANE; VINYL CYCLOHEXANE MONOXIDE
Chemical family: EPOXIDE

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

1.2.1. Relevant identified uses
Use of the substance/mixture: Chemical intermediate

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet

GELEST, INC.
11 East Steel Road
Morrisville, PA 19067
USA
T 215-547-1015 - F 215-547-2484 · (M-F): 8:00 AM - 5:30 PM EST
info@gelest.com · www.gelest.com

GELEST INC.
Fritz-Klatte-Strasse 8
65933 Frankfurt
Germany
T +49 (0) 69 3535106-500 · F +49 (0) 69 3535106-501 · (M-F): 8:00 AM - 4:00 PM
info@gelestde.com · www.gelestde.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3
Acute toxicity (oral), Category 4

Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

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

Signal word (CLP): Warning
Hazard statements (CLP): H226 - Flammable liquid and vapour.
H302 - Harmful if swallowed.
Precautionary statements (CLP): P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 - Ground/bond container and receiving equipment.
P264 - Wash hands thoroughly after handling.
P330 - Rinse mouth.
P301+P312 - IF SWALLOWED: Call a doctor if you feel unwell.

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Substance type</th>
<th>Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mono-constituent</td>
<td>4-VINYL-1,2-EPOXYCYCLOHEXENE</td>
<td>106-86-5</td>
</tr>
</tbody>
</table>

Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Vinyl-1,2-epoxycyclohexane</td>
<td>(CAS-No.) 106-86-5 (EC-No.) 203-436-1</td>
<td>97 - 100</td>
<td>Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

3.2. Mixtures
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash with plenty of water/… Get medical advice/attention.

First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Get medical advice/attention.

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

Symptoms/effects after inhalation: No information available.
Symptoms/effects after skin contact: May cause skin irritation.
Symptoms/effects after eye contact: May cause eye irritation.
Symptoms/effects after ingestion: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapour. Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

Explosion hazard: May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapour and mist.
**SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

**General measures**
- Eliminate every possible source of ignition. Use special care to avoid static electric charges.

#### 6.1.1. For non-emergency personnel
- **Protective equipment**: Wear protective equipment as described in Section 8.
- **Emergency procedures**: Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders
- **Protective equipment**: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions
- Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up
- **For containment**: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- **Methods for cleaning up**: Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.

### 6.4. Reference to other sections
- See Heading 8. Exposure controls and personal protection.

**SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling
- **Additional hazards when processed**: Handle empty containers with care because residual vapours are flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **Precautions for safe handling**: Avoid all eye and skin contact and do not breathe vapour and mist. Ground/bond container and receiving equipment. Provide good ventilation in process area to prevent formation of vapour. Take precautionary measures against static discharge. Use only non-sparking tools.
- **Hygiene measures**: Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities
- **Technical measures**: Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical equipment.
- **Storage conditions**: Keep container tightly closed. Keep in a cool place.
- **Storage area**: Store in a well-ventilated place. Store away from heat.

### 7.3. Specific end use(s)
- No additional information available

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

### 8.1. Control parameters
- No additional information available

### 8.2. Exposure controls
- **Appropriate engineering controls**: Provide local exhaust or general room ventilation.

#### Personal protective equipment:
- Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Hand protection:
- Neoprene or nitrile rubber gloves

#### Eye protection:
- Chemical goggles. Contact lenses should not be worn

#### Skin and body protection:
- Wear suitable protective clothing

#### Respiratory protection:
4-VINYL-1,2-EPOXYCYCLOHEXENE
Safety Data Sheet

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified organic vapor (black cartridge) respirator.

SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>124.18 g/mol</td>
</tr>
<tr>
<td>Colour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour</td>
<td>Disagreeable</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.469</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>-43 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>169 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>45 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>285 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Flammable liquid and vapour.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt; 0.5 mm Hg @ 20°C</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.952</td>
</tr>
<tr>
<td>% Volatiles</td>
<td>&lt; 3 %</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
Heat. Open flame. Sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Organic acid vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Harmful if swallowed.

4-VINYL-1,2-EPOXYCYCLOHEXENE (106-86-5)
ATE CLP (oral) 2000 mg/kg bodyweight
### 4-Vinyl-1,2-epoxycyclohexene (106-86-5)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>LD₅₀ oral rat</td>
<td>2000 mg/kg</td>
</tr>
<tr>
<td>LD₅₀ dermal rabbit</td>
<td>2830 mg/kg</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
<td>2000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE CLP (dermal)</td>
<td>2830 mg/kg bodyweight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Symptoms/effects after inhalation</td>
<td>No information available</td>
</tr>
<tr>
<td>Symptoms/effects after skin contact</td>
<td>May cause skin irritation</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact</td>
<td>May cause eye irritation</td>
</tr>
<tr>
<td>Symptoms/effects after ingestion</td>
<td>Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.</td>
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</tbody>
</table>

### SECTION 12: Ecological information

**12.1. Toxicity**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Classification</th>
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</thead>
<tbody>
<tr>
<td>Acute aquatic toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

No additional information available

**12.4. Mobility in soil**

No additional information available

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

No additional information available

**12.6. Other adverse effects**

No additional information available

### SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

- Sewage disposal recommendations: Do not dispose of waste into sewer.
- Product/Packaging disposal recommendations: Incinerate. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.
- Additional information: Handle empty containers with care because residual vapours are flammable.
- Ecology - waste materials: Avoid release to the environment.

### SECTION 14: Transport information

**14.1. UN number**

In accordance with ADR / RID / IMDG / IATA / ADN

**14.1. UN number**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>UN-No. (ADR)</td>
<td>1993</td>
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<tr>
<td>UN-No. (IMDG)</td>
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<tr>
<td>UN-No. (IATA)</td>
<td>1993</td>
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<td>UN-No. (ADN)</td>
<td>1993</td>
</tr>
<tr>
<td>UN-No. (RID)</td>
<td>1993</td>
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</table>

**14.2. UN proper shipping name**

<table>
<thead>
<tr>
<th>Description</th>
<th>UN proper shipping name</th>
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</thead>
<tbody>
<tr>
<td>Proper Shipping Name (ADR)</td>
<td>FLAMMABLE LIQUID, N.O.S.</td>
</tr>
<tr>
<td>Proper Shipping Name (IMDG)</td>
<td>FLAMMABLE LIQUID, N.O.S.</td>
</tr>
</tbody>
</table>
# 4-VINYLPOLYOL-1,2-EPOXYCISHXENE

## Safety Data Sheet

### Proper Shipping Name (IATA)
Flammable liquid, n.o.s.

### Proper Shipping Name (ADN)
FLAMMABLE LIQUID, N.O.S.

### Transport document description (ADR)
UN 1993 FLAMMABLE LIQUID, N.O.S. (4-VINYLPOLYOL-1,2-EPOXYCISHXENE), 3, III, (D/E)

### Transport document description (IMDG)
UN 1993 FLAMMABLE LIQUID, N.O.S. (4-VINYLPOLYOL-1,2-EPOXYCISHXENE), 3, III

### Transport document description (IATA)
UN 1993 Flammable liquid, n.o.s. (4-VINYLPOLYOL-1,2-EPOXYCISHXENE), 3, III

### Transport document description (ADN)
UN 1993 FLAMMABLE LIQUID, N.O.S. (4-VINYLPOLYOL-1,2-EPOXYCISHXENE), 3, III

### Transport document description (RID)
UN 1993 FLAMMABLE LIQUID, N.O.S. (4-VINYLPOLYOL-1,2-EPOXYCISHXENE), 3, III

<table>
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<tr>
<th>Section</th>
<th>Details</th>
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<tbody>
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<td>14.3. Transport hazard class(es)</td>
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<tr>
<td>ADR</td>
<td>Transport hazard class(es) (ADR): 3, Danger labels (ADR): 3</td>
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<tr>
<td>IMDG</td>
<td>Transport hazard class(es) (IMDG): 3, Danger labels (IMDG): 3</td>
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<td>Transport hazard class(es) (IATA): 3, Hazard labels (IATA): 3</td>
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<td>ADN</td>
<td>Transport hazard class(es) (ADN): 3, Danger labels (ADN): 3</td>
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<tr>
<td>RID</td>
<td>Transport hazard class(es) (RID): 3, Danger labels (RID): 3</td>
</tr>
</tbody>
</table>

| 14.4. Packing group | Packing group (ADR): III |

---

Print date: 10/04/2019

EN (English)

SDS ID: ENEV4540
4-VINYL-1,2-EPOXYCYCLOHEXENE
Safety Data Sheet

Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : No
Other information : IMO IMDG- code: 3.2

14.6. Special precautions for user

- Overland transport
  Classification code (ADR) : F1
  Special provisions (ADR) : 274, 601, 640E
  Limited quantities (ADR) : 5l
  Excepted quantities (ADR) : E1
  Packing instructions (ADR) : P001, IBC03, LP01, R001
  Portable tank and bulk container instructions (ADR) : T4
  Portable tank and bulk container special provisions (ADR) : TP1, TP29
  Tank code (ADR) : LGBF
  Vehicle for tank carriage : FL
  Transport category (ADR) : 3
  Special provisions for carriage - Packages (ADR) : V12
  Special provisions for carriage - Operation (ADR) : S2
  Hazard identification number (Kemler No.) : 30
  Orange plates : 30
  Tunnel restriction code (ADR) : D/E

- Transport by sea
  Special provisions (IMDG) : 223, 274, 955
  Limited quantities (IMDG) : 5 L
  Excepted quantities (IMDG) : E1
  Packing instructions (IMDG) : P001, LP01
  IBC packing instructions (IMDG) : IBC03
  Tank instructions (IMDG) : T4
  Tank special provisions (IMDG) : TP1, TP29
  EmS-No. (Fire) : F-E
  EmS-No. (Spillage) : S-E
  Stowage category (IMDG) : A

- Air transport
  PCA Excepted quantities (IATA) : E1
  PCA Limited quantities (IATA) : Y344
  PCA limited quantity max net quantity (IATA) : 10L
  PCA packing instructions (IATA) : 355
  PCA max net quantity (IATA) : 60L
  CAO packing instructions (IATA) : 366
  CAO max net quantity (IATA) : 220L
  Special provisions (IATA) : A3
  ERG code (IATA) : 3L
4-VINYL-1,2-EPoxyCyclohexene
Safety Data Sheet

- Inland waterway transport
  Classification code (ADN): F1
  Special provisions (ADN): 274, 601, 640E
  Limited quantities (ADN): 5 L
  Excepted quantities (ADN): E1
  Carriage permitted (ADN): T
  Equipment required (ADN): PP, EX, A
  Ventilation (ADN): VE01
  Number of blue cones/lights (ADN): 0

- Rail transport
  Classification code (RID): F1
  Special provisions (RID): 274, 601, 640E
  Limited quantities (RID): 5L
  Excepted quantities (RID): E1
  Packing instructions (RID): P001, IBC03, LP01, R001
  Mixed packing provisions (RID): MP19
  Portable tank and bulk container instructions (RID): T4
  Portable tank and bulk container special provisions (RID): TP1, TP29
  Tank codes for RID tanks (RID): LGBF
  Transport category (RID): 3
  Special provisions for carriage – Packages (RID): W12
  Colis express (express parcels) (RID): CE4
  Hazard identification number (RID): 30

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions
4-VINYL-1,2-EPoxyCyclohexene is not on the REACH Candidate List
4-VINYL-1,2-EPoxyCyclohexene is not on the REACH Annex XIV List
4-VINYL-1,2-EPoxyCyclohexene is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

% Volatiles: < 3 %

15.1.2. National regulations

Germany

Netherlands
SZW-lijst van kankerverwekkende stoffen: The substance is not listed
SZW-lijst van mutagene stoffen: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling: The substance is not listed

Denmark

Print date: 10/04/2019   EN (English)   SDS ID: ENEV4540
4-VINYL-1,2-EPOXYCYCLOHEXENE
Safety Data Sheet

Class for fire hazard : Class II-1
Store unit : 5 liter
Classification remarks : R10 <H226,H302>; Emergency management guidelines for the storage of flammable liquids must be followed

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td>Not Determined, No Data</td>
</tr>
<tr>
<td>NA</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>LD</td>
<td>Lethal Dose</td>
</tr>
<tr>
<td>LC</td>
<td>Lethal Concentration</td>
</tr>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimates</td>
</tr>
<tr>
<td>H</td>
<td>hour</td>
</tr>
<tr>
<td>°C</td>
<td>°C unless otherwise stated</td>
</tr>
<tr>
<td>mm</td>
<td>millimeters</td>
</tr>
<tr>
<td>Hg, torr</td>
<td>Hg, torr</td>
</tr>
<tr>
<td>PEL</td>
<td>permissible exposure level</td>
</tr>
<tr>
<td>TWA</td>
<td>time weighted average</td>
</tr>
<tr>
<td>TLV</td>
<td>threshold limit value</td>
</tr>
<tr>
<td>TG</td>
<td>Test Guideline</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>HMIS</td>
<td>Hazardous Material Information System</td>
</tr>
<tr>
<td>CAS No.</td>
<td>Chemical Abstract Service Registration Number</td>
</tr>
<tr>
<td>EC No.</td>
<td>European Commission Registration Number</td>
</tr>
<tr>
<td>EC Index No.</td>
<td>European Commission Index Number</td>
</tr>
<tr>
<td>OECD</td>
<td>The Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>GHS</td>
<td>The Globally Harmonized System of Classification and Labelling</td>
</tr>
<tr>
<td>APF</td>
<td>Assigned Protection Factor</td>
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</tbody>
</table>

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °C: °C unless otherwise stated; mm: millimeters; torr: PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information : Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral), Category 4</th>
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<tr>
<td>Flam. Liq. 3</td>
<td>Flammable liquids, Category 3</td>
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<tr>
<td>H226</td>
<td>Flammable liquid and vapour.</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
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</table>

SDS EU (REACH Annex II) - Custom

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Print date: 10/04/2019
EN (English)
SDS ID: ENEV4540