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

### 1.1. Product identifier

N,N'-Diisopropylcarbodiimide

**Further trade names**

N,N'-methanetetraylbis(1-methylethylamine)
DIC
1,3-diisopropylcarbodiimide
Diizopropylcarbodiimide
N,N'-Di(Propan-2-yl)methanediimine
N,N'-Diisopropylcarbodiimid
N,N'-Methanetetraylbis(1-methylethylamine)
Diisopropylmethanediimine

| | |
|---|---|
| Abbreviation: | DIC |
| REACH Registration Number: | 01-2120754999-28-XXXX |
| CAS No: | 693-13-0 |
| EC No: | 211-743-7 |

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

**Use of the substance/mixture**

Laboratory chemical. Manufacture of the substance

**Uses advised against**

Do not use for private purposes (household).
Restrictions on use: Pharmaceutical substance

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

| | | | |
|---|---|---|---|
| Company name: | Iris Biotech GmbH | | |
| Street: | Adalbert-Zoellner-Straße 1 | | |
| Place: | D-95615 Marktredwitz, Germany | | |
| Post-office box: | 568<br>D-95605 Marktredwitz, Germany | | |
| Telephone: | +49 9231 97121 0 | Telefax: | +49 9231 97121 99 |
| e-mail: | info@iris-biotech.de | | |
| Contact person: | Compliance Department | Telephone: | +49 9231 97121 0 |
| e-mail: | sds@iris-biotech.de | | |
| Internet: | www.iris-biotech.de | | |
| Responsible Department: | Only available during office hours. | | |

### 1.4. Emergency telephone number:

+49 (0)89 19240 (POISON CENTER Munich: 24 h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**GB CLP Regulation**

Flam. Liq. 3; H226
Acute Tox. 2; H330
Skin Irrit. 2; H315
Eye Dam. 1; H318
Resp. Sens. 1; H334
Skin Sens. 1; H317
STOT SE 3; H335
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

### GB CLP Regulation

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**Precautionary statements**

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting equipment. |
| P242 | Use non-sparking tools. |
| P243 | Take action to prevent static discharges. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. |
| P284 | Wear respiratory protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P310 | Immediately call a POISON CENTER/doctor. |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER/doctor. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container to an approved disposal site. |

**Additional advice on labelling**

Warning - substance not yet tested completely.

## 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

## 3.1. Substances

**Chemical characterization**

N,N'-methanetetraylbis(1-methylethylamine)

Sum formula: C7H14N2

Molecular weight: 126,20 g/mol

**Hazardous components**

| CAS No | Chemical name | | | Quantity |
|---|---|---|---|---|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulation) | | | |
| 693-13-0 | N,N'-Diisopropylcarbodiimide | | | <= 100 % |
| | 211-743-7 | | 01-2120754999-28-XXXX | |
| | Flam. Liq. 3, Acute Tox. 2, Skin Irrit. 2, Eye Dam. 1, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H226 H330 H315 H318 H334 H317 H335 H400 H410 | | | |

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

| CAS No | EC No | Chemical name | Quantity |
|---|---|---|---|
| | Specific Conc. Limits, M-factors and ATE | | |
| 693-13-0 | 211-743-7 | N,N'-Diisopropylcarbodiimide | <= 100 % % |
| | inhalation: ATE = 0,5 mg/l (vapours); inhalation: LC50 = 0,13 mg/l (dusts or mists) | | |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After inhalation**

Provide fresh air. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Call a physician immediately. Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.
In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with skin**

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary. After contact with skin, wash immediately with plenty of water and soap.
In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

**After ingestion**

Rinse mouth thoroughly with water. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Never give anything by mouth to an unconscious person or a person with cramps.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
In all cases of doubt, or when symptoms persist, seek medical advice.

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

May produce an allergic reaction. May cause respiratory irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. Water spray. alcohol resistant foam. Dry extinguishing powder. Carbon dioxide (CO2). Sand.

**Unsuitable extinguishing media**

Water. High power water jet.

### 5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air. Thermal decomposition can lead to the escape of irritating gases and vapours.

In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrogen oxides (NOx).

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Usual measures for fire prevention.

Use water spray jet to protect personnel and to cool endangered containers.

## SECTION 6: Accidental release measures

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

**General advice**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear personal protection equipment.

Remove all sources of ignition.

Vapours are heavier than air. Vapours can form explosive mixtures with air.

**For non-emergency personnel**

Cover drains.

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

**For emergency responders**

Cover drains.

Stop and contain spill/release if it can be done safely.

### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

**For containment**

Cover drains.

Stop and contain spill/release if it can be done safely.

**For cleaning up**

Universal binder/ Binder

**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Take up mechanically, placing in appropriate containers for disposal.

Clear contaminated areas thoroughly.

### 6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13 Treat the recovered material as prescribed in the section on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.
Keep away from sources of ignition - No smoking.
Take action to prevent static discharges.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air. Usual measures for fire prevention.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid contact with skin, eyes and clothes. Provide adequate ventilation. When using do not eat, drink or smoke. Wash hands before breaks and after work.

**Further information on handling**

Protect from light!

### 7.2. Conditions for safe storage, including any incompatibilities

**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Handle and store contents under inert gas. Protect from moisture. Protect from light!
Containers which are opened carefully and kept upright to prevent leakage.
storage temperature: +2°C - +8°C

**Hints on joint storage**

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Additional advice on limit values**

To date, no national critical limit values exist.

### 8.2. Exposure controls

**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. The receiver of our product is singularly responsible for adhering to existing laws

and regulations.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear eye/face protection.
Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wear suitable gloves.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

**Skin protection**

Wear suitable protective clothing. Combinaison complète de protection contre les produits chimiques, Le type d'équipement de protection doit être sélectionné en fonction de la concentration et de la quantité de la substance dangereuse. Wear anti-static footwear and clothing

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Thermal hazards**

Flammable Liquids, Category 3

**Environmental exposure controls**

Do not allow to enter into surface water or drains.
Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state: | liquid, clear |
| Colour: | colourless/ light yellow |
| Odour: | stinging |

**Changes in the physical state**

| | |
|---|---|
| Melting point/freezing point: | not determined |
| Boiling point or initial boiling point and boiling range: | 145-148 °C |
| Sublimation point: | not determined |
| Softening point: | not determined |
| Flash point: | 31 °C |

**Flammability**

| | |
|---|---|
| Solid/liquid: | not applicable |
| Gas: | not applicable |

**Explosive properties**

No data available

| | |
|---|---|
| Lower explosion limits: | No data available |
| Upper explosion limits: | No data available |

**Self-ignition temperature**

| | |
|---|---|
| Solid: | not applicable |
| Gas: | not applicable |
| Decomposition temperature: | not determined |
| pH-Value: | No data available |
| Viscosity / dynamic: | No data available |
| Viscosity / kinematic: | No data available |
| Flow time: | No data available |
| Water solubility: | No data available |

**Solubility in other solvents**

No data available

| | |
|---|---|
| Partition coefficient n-octanol/water: | No data available |
| Vapour pressure: (at 25 °C) | 6,8 hPa |
| Density (at 20 °C): | 0,815 g/cm³ |
| Bulk density: | not applicable |
| Relative vapour density: | No data available |

## 9.2. Other information

**Information with regard to physical hazard classes**

| | |
|---|---|
| Sustaining combustion: | Sustaining combustion |

Oxidizing properties

No data available

**Other safety characteristics**

| | |
|---|---|
| Solvent separation test: | No data available |
| Solid content: | not determined |
| Evaporation rate: | No data available |

**Further Information**

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

Flammable.
Can form explosive gas-air mixtures.

## 10.2. Chemical stability

Stable under recommended storage conditions.

## 10.3. Possibility of hazardous reactions

No data available

## 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Protect from moisture.
Keep away from heat.
Protect from light!

**10.5. Incompatible materials**

Oxidizing agents, strong., Acid.

**10.6. Hazardous decomposition products**

Thermal decomposition can lead to the escape of irritating gases and vapours.
In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrogen oxides (NOx).

**Further information**

In case of fire: See chapter 5.

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in GB CLP Regulation**

**Toxicocinetics, metabolism and distribution**

No data available

**Acute toxicity**

Fatal if inhaled.
LD50 intravenous - Mouse: 36 mg/kg

| CAS No | Chemical name | | | | | |
|---|---|---|---|---|---|---|
| | Exposure route | Dose | | Species | Source | Method |
| 693-13-0 | N,N'-Diisopropylcarbodiimide | | | | | |
| | inhalation vapour | ATE | 0,5 mg/l | | | |
| | inhalation (4 h) dust/mist | LC50 | 0,13 mg/l | Rat | | |

**Irritation and corrosivity**

Causes skin irritation.
Causes serious eye damage.

**Sensitising effects**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (N,N'-Diisopropylcarbodiimide)
May cause an allergic skin reaction. (N,N'-Diisopropylcarbodiimide)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.
Germ cell mutagenicity
Mutagenicity (mammalian cell test):
Result: positive
Notes literature value

Ames test
Result: Ames test negative.
Notes literature value

**STOT-single exposure**

May cause respiratory irritation. (N,N'-Diisopropylcarbodiimide)

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**Specific effects in experiment on an animal**

No data available

**Practical experience**

No data available

### 11.2. Information on other hazards

**Other information**

Serious eye damage/eye irritation, Nausea, Headache. vomiting. Corneal opacity. Risk of blindness!
Symptoms may be delayed.

After absorption: Headache.

**Further information**

RTECS: FF2175000

Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated. Other dangerous properties can not be excluded.

This substance should be handled with particular care.

## SECTION 12: Ecological information

### 12.1. Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| CAS No | Chemical name | | | | | | |
|---|---|---|---|---|---|---|---|
| | Aquatic toxicity | Dose | | [h] \| [d] | Species | Source | Method |
| 693-13-0 | N,N'-Diisopropylcarbodiimide | | | | | | |
| | Acute algae toxicity | ErC50 mg/l | ca. 1,52 | 96 h | Desmodesmus subspicatus | Study report (2017) | QSAR |
| | Acute crustacea toxicity | EC50 mg/l | ca. 0,91 | 48 h | Daphnia magna | REACh Registration Dossier | QSAR |

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

**Partition coefficient n-octanol/water**

| CAS No | Chemical name | Log Pow |
|---|---|---|
| 693-13-0 | N,N'-Diisopropylcarbodiimide | ca. 4,11 |

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of UK REACH.

### 12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

### 12.7. Other adverse effects

Warning - substance not yet tested completely.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.
Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation.
Consult the appropriate local waste disposal expert about waste disposal.

**Contaminated packaging**

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 2929 |
| **14.2. UN proper shipping name:** | TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (N,N'-Diisopropylcarbodiimide) |
| **14.3. Transport hazard class(es):** | 6.1 |
| **14.4. Packing group:** | I |
| Hazard label: | 6.1+3 |

| | |
|---|---|
| Classification code: | TF1 |
| Special Provisions: | 274 315 |
| Limited quantity: | 0 |
| Excepted quantity: | E5 |
| Transport category: | 1 |
| Hazard No: | 663 |
| Tunnel restriction code: | C/D |

**Inland waterways transport (ADN)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 2929 |
| **14.2. UN proper shipping name:** | TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (N,N'-Diisopropylcarbodiimide) |
| **14.3. Transport hazard class(es):** | 6.1 |
| **14.4. Packing group:** | I |
| Hazard label: | 6.1+3 |

| | |
|---|---|
| Classification code: | TF1 |
| Special Provisions: | 274 315 802 |
| Limited quantity: | 0 |
| Excepted quantity: | E5 |

**Marine transport (IMDG)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 2929 |
| **14.2. UN proper shipping name:** | TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (N,N'-Diisopropylcarbodiimide) |
| **14.3. Transport hazard class(es):** | 6.1 |
| **14.4. Packing group:** | I |
| Hazard label: | 6.1+3 |

| | |
|---|---|
| Special Provisions: | 274, 315 |
| Limited quantity: | 0 |
| Excepted quantity: | E5 |
| EmS: | F-E, S-D |

**Air transport (ICAO-TI/IATA-DGR)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 2929 |
| **14.2. UN proper shipping name:** | TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (N,N'-Diisopropylcarbodiimide) |
| **14.3. Transport hazard class(es):** | 6.1 |
| **14.4. Packing group:** | I |
| Hazard label: | 6.1+3 |

| | |
|---|---|
| Special Provisions: | A4 A137 |
| Limited quantity Passenger: | Forbidden |
| Passenger LQ: | Forbidden |
| Excepted quantity: | E5 |
| IATA-packing instructions - Passenger: | 652 |
| IATA-max. quantity - Passenger: | 1 L |
| IATA-packing instructions - Cargo: | 658 |
| IATA-max. quantity - Cargo: | 30 L |

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: Yes

**14.6. Special precautions for user**

Warning: Combustible liquid. Toxic.

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

not applicable

## SECTION 15: Regulatory information

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

| | |
|---|---|
| 2010/75/EU (VOC): | 100 % (815 g/l) |
| 2004/42/EC (VOC): | 100 % (815 g/l) |
| Information according to 2012/18/EU (SEVESO III): | H2 ACUTE TOXIC |
| Additional information: | P5c, E1 |

**Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

**National regulatory information**

| | |
|---|---|
| Employment restrictions: | Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. |
| Water hazard class (D): | 3 - highly hazardous to water |
| Skin resorption/Sensitization: | Causes allergic hypersensitivity reactions. |

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

**Changes**

This data sheet contains changes from the previous version in section(s): 1,11,12.

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

**Relevant H and EUH statements (number and full text)**

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. Warning - substance not yet tested completely.
The product is intended for research, analysis and scientific education.
The receiver of our product is singularly responsible for adhering to existing laws and regulations.
The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.