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

## 1.1 Product identifier

Trade name: AUTOL MULTISPRAY M 2000
MIT MoS2

UFI: Y6D0-10TY-5005-S2W2

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

General use: Lubricant

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

Company name: Enilive Schmiertechnik GmbH
Street/POB-No.: Paradiesstraße 14
Postal Code, city: 97080 Würzburg
Germany
E-mail: info.wuerzburg@enilive.com
Telephone: +49 (0)931-90098-0
Telefax: +49 (0)931-98442

Department responsible for information:
Application Engineering & Product Management (AEPM)
Telephone: +49 (0)931-90098-0
E-mail: technik.wuerzburg@enilive.com

## 1.4 Emergency telephone number

**GIZ-Nord, Göttingen**
**Telephone: +49 (0)551-19240**

# SECTION 2: Hazards identification

## 2.1 Classification of the substance or mixture

**Classification according to EC regulation 1272/2008 (CLP)**

| | |
|---|---|
| Aerosol 1; H222; H229 | Extremely flammable aerosol. Pressurised container: May burst if heated. |
| STOT SE 3; H336 | May cause drowsiness or dizziness. |
| Asp. Tox. 1; H304 | May be fatal if swallowed and enters airways. |
| (EUH066) | Repeated exposure may cause skin dryness or cracking. |

## 2.2 Label elements

**Labelling (CLP)**

Signal word: **Danger**

| | | |
|---|---|---|
| Hazard statements: | H222 | Extremely flammable aerosol. |
| | H229 | Pressurised container: May burst if heated. |
| | H336 | May cause drowsiness or dizziness. |
| | EUH066 | Repeated exposure may cause skin dryness or cracking. |
| Precautionary statements: | | |
| | P101 | If medical advice is needed, have product container or label at hand. |
| | P102 | Keep out of reach of children. |
| | P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | P211 | Do not spray on an open flame or other ignition source. |
| | P251 | Do not pierce or burn, even after use. |
| | P261 | Avoid breathing vapours/spray. |
| | P271 | Use only outdoors or in a well-ventilated area. |
| | P312 | Call a POISON CENTER/doctor if you feel unwell. |
| | P405 | Store locked up. |
| | P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| | P501 | Dispose of contents/container to hazardous or special waste collection point. |

**Special labelling**

Text for labelling:

Contains:
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

## 2.3 Other hazards

Potentially explosive mixtures may form if adequate ventilation is not provided.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

# SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

## 3.2 Mixtures

Chemical characterisation: Blend of active ingredients with propellant:

Hazardous ingredients:

| Identifiers | Designation<br>Classification | Content |
|---|---|---|
| REACH 01-2119463258-33-xxxx<br>list no. 919-857-5<br>CAS 68551-16-6 | Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics<br>Flam. Liq. 3; H226. STOT SE 3; H336.<br>Asp. Tox. 1; H304. (EUH066). | 25 - 50 % |
| REACH 01-2119456620-43-xxxx<br>list no. 926-141-6<br>CAS 64742-47-8 | Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics<br>Asp. Tox. 1; H304. (EUH066). | 2,5 - 10 % |
| REACH 01-2119475602-38-xxxx<br>EC No. 201-142-8<br>CAS 78-78-4 | Isopentane<br>Flam. Liq. 1; H224. STOT SE 3; H336.<br>Asp. Tox. 1; H304. Aquatic Chronic 2; H411. (EUH066). | < 1 % |
| REACH 01-2119474691-32-xxxx<br>EC No. 203-448-7<br>CAS 106-97-8 | Butane<br>Flam. Gas 1A; H220. Press. Gas (Liq.); H280. | 20 - 30 % |
| REACH 01-2119486944-21-xxxx<br>EC No. 200-827-9<br>CAS 74-98-6 | Propane<br>Flam. Gas 1A; H220. Press. Gas (Liq.); H280. | 10 - 20 % |
| REACH 01-2119485395-27-xxxx<br>EC No. 200-857-2<br>CAS 75-28-5 | Isobutane<br>Flam. Gas 1A; H220. Press. Gas (Liq.); H280. | < 2 % |

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

Additional information: Contains White mineral oil (petroleum) and Sulfonic acids, petroleum, calcium salts. The maximum workplace exposure limits are, where necessary, listed in section 8.

Information about Butane and Isobutane:
Contains < 0,1 % 1,3-Butadiene.

# SECTION 4: First aid measures

## 4.1 Description of first aid measures

General information: IF exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection!

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.

Following skin contact: Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After swallowing: Rinse mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Caution if victim vomits: Risk of aspiration! Keep airway open. Immediately get medical attention.

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

May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.
Repeated exposure may cause skin dryness or cracking.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.

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

Treat symptomatically.
Aspiration hazard: in case of swallowing or vomiting danger of penetration into the lungs.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, extinguishing powder and carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet.

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

Extremely flammable aerosol. Pressurised container: May burst if heated.
May form dangerous gases and vapours in case of fire. Furthermore, there may develop:
Pyrolysis products, carbon monoxide and carbon dioxide.

### 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.
Move undamaged containers from immediate hazard area if it can be done safely.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Do not allow fire water to penetrate into surface or ground water.
Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

## SECTION 6: Accidental release measures

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

Avoid breathing vapours/spray. Avoid contact with the substance.
If possible, eliminate leakage. In case of leakage, eliminate all ignition sources. Provide adequate ventilation.
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants.

### 6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains. Danger of explosion!
In case of release, notify competent authorities.

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

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).
Thoroughly clean surrounding area.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

### 6.4 Reference to other sections

Refer additionally to section 8 and 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid breathing vapours/spray.
Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.
When handling large quantities, supply emergency spray.
Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.

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

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Keep in a cool place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Store containers in upright position.
Storage temperature: 15 - 35 °C
Storage stability: ≥ 24 months

Hints on joint storage: Do not store together with: Oxidizing agents.
Keep away from food, drink and animal feedingstuffs.

Storage class: 2B = aerosol dispensers and lighters

### 7.3 Specific end use(s)

No information available.

# SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

Occupational exposure limit values:

| CAS No. | Designation | Type | Limit value |
|---|---|---|---|
| 8042-47-5 | White mineral oil (petroleum) | Germany: TRGS 900 Kurzzeit | 20 mg/m³ (respirable fraction) |
| | | Germany: TRGS 900 Langzeit | 5 mg/m³ (respirable fraction) |
| 64742-47-8 | Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | Germany: DFG Kurzzeit | 20 mg/m³ (Aerosol, respirable fraction) |
| | | Germany: DFG Langzeit | 5 mg/m³ (Aerosol, respirable fraction) |
| | | Germany: TRGS 900 Kurzzeit | 600 mg/m³ (hydrocarbons, aliphatic, C9-C14) |
| | | Germany: TRGS 900 Langzeit | 300 mg/m³ (hydrocarbons, aliphatic, C9-C14) |
| 61789-86-4 | Sulfonic acids, petroleum, calcium salts | Germany: TRGS 900 Kurzzeit | 20 mg/m³ (respirable fraction) |
| | | Germany: TRGS 900 Langzeit | 5 mg/m³ (respirable fraction) |
| 78-78-4 | Isopentane | Europe: IOELV: TWA | 3000 mg/m³; 1000 ppm |
| | | Germany: TRGS 900 Kurzzeit | 6000 mg/m³; 2000 ppm |
| | | Germany: TRGS 900 Langzeit | 3000 mg/m³; 1000 ppm |
| 106-97-8 | Butane | Germany: TRGS 900 Kurzzeit | 9600 mg/m³; 4000 ppm |
| | | Germany: TRGS 900 Langzeit | 2400 mg/m³; 1000 ppm |
| 74-98-6 | Propane | Germany: TRGS 900 Kurzzeit | 7200 mg/m³; 4000 ppm |
| | | Germany: TRGS 900 Langzeit | 1800 mg/m³; 1000 ppm |
| 75-28-5 | Isobutane | Germany: TRGS 900 Kurzzeit | 9600 mg/m³; 4000 ppm |
| | | Germany: TRGS 900 Langzeit | 2400 mg/m³; 1000 ppm |

DNEL/DMEL:

Information about Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics (List no. 919-857-5):
DNEL, workers, inhalative, systemic, long-term: 871 mg/m³
DNEL, workers, dermal, systemic, long-term: 77 mg/kg bw/d
DNEL, consumers, inhalative, systemic, long-term: 185 mg/m³
DNEL, consumers, dermal, systemic, long-term: 46 mg/kg bw/d
DNEL, consumers, oral, systemic, long-term: 46 mg/kg bw/d

## 8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

## Personal protection equipment

### Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded.
Use filter apparatus type A/P2.
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection: Protective gloves according to DIN EN ISO 374:1.
Glove material: Nitrile rubber
Breakthrough time: > 480 min
Layer thickness: 0,4 mm
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to DIN EN ISO 16321-1:2022.

Body protection: Flame retardant, antistatic and chemical resistant protective clothing.

General protection and hygiene measures:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapours/spray.
Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.
Do not get in eyes, on skin, or on clothing. When using do not eat or drink. Contaminated work clothing should not be allowed out of the workplace.
Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.
Have eye wash bottle or eye rinse ready at work place. When handling large quantities, supply emergency spray.

### Environmental exposure controls

Refer to "6.2 Environmental precautions".

# SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical state at 20 °C and 101.3 kPa | liquid<br>Form: Aerosol |
| Colour: | yellowish, turbid |
| Odour: | No data available |
| Odour threshold: | No data available |
| Melting point/freezing point: | No data available |
| Initial boiling point and boiling range: | -60,9 °C (Butane) |
| Flammability: | Extremely flammable aerosol. |
| Upper/lower flammability or explosive limits: | LEL (Lower Explosion Limit): 1,90 Vol-% (Butane)<br>UEL (Upper Explosive Limit): 15,00 Vol-% (Butane) |
| Flash point/flash point range: | -84 °C (Butane) |
| Decomposition temperature: | No data available |
| pH: | Not applicable |
| Viscosity, kinematic: | No data available |

| | |
|---|---|
| Water solubility: | Not/slightly miscible (Liquid) |
| Partition coefficient: n-octanol/water: | No data available |
| Vapour pressure: | No data available |
| Density: | 0,792 g/mL (Active agent) |
| Vapour density: | No data available |
| Particle characteristics: | Not applicable |

### 9.2 Other information

| | |
|---|---|
| Explosive properties: | Vapours can form explosive mixtures with air. |
| Oxidizing characteristics: | No data available |
| Auto-ignition temperature: | No data available |
| Evaporation rate: | No data available |
| Additional information: | No data available |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Extremely flammable aerosol.
Vapours can form explosive mixtures with air.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Pressurised container: May burst if heated.

### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### 10.5 Incompatible materials

Oxidizing agents.

### 10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

# SECTION 11: Toxicological information

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects:

The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 2.000 mg/kg

Acute toxicity (dermal): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 2.000 mg/kg

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
ATEmix (calculated, dusts/mist): > 5 mg/L/4h

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): STOT SE 3; H336 = May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Asp. Tox. 1; H304 = May be fatal if swallowed and enters airways.

## 11.2 Information on other hazards

Endocrine disrupting properties:

No data available

Other information:

Information about Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics (List no. 919-857-5):
LD50, Rat, oral: > 5.000 mg/kg (OECD 401)
LD50, Rabbit, dermal: > 5.000 mg/kg (OECD 402)
LC50, Rat, inhalative: > 5.000 mg/m³/8h (OECD 403)

Information about Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (List no. 926-141-6):
LD50, Rat, oral: > 15.000 mg/kg (OECD 401)
LD50, Rabbit, dermal: > 5.000 mg/kg (OECD 402)
LC50, Rat, inhalative: > 4,951 mg/L/4h (OECD 403)

# SECTION 12: Ecological information

## 12.1 Toxicity

Aquatic toxicity: Information about Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics (List no. 919-857-5):
Fish toxicity:
LL50 Oncorhynchus mykiss: > 1.000 mg/L/96h (OECD 203)
Daphnia toxicity:
EL50 Daphnia magna (Big water flea): > 1.000 mg/L/48h (OECD 202)
Algae toxicity:
EL50 Pseudokirchneriella subcapitata (green algae): > 1.000 mg/L/72h (OECD 201)

Water Hazard Class: 1 = slightly hazardous to water (Self-classification (mixture; calculation rule).)

## 12.2 Persistence and degradability

Further details: No data available

## 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:
No data available

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

No data available

## 12.6 Endocrine disrupting properties

No data available

## 12.7 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

**Product**

Waste key number: 16 05 04* = Gases in pressure containers (including halons) containing hazardous substances/Aerosol
* = Evidence for disposal must be provided.

Recommendation: Do not pierce or burn, even after use.
Special waste. Dispose of waste according to applicable legislation.
Do not dispose of with household waste.

### Package

Recommendation: Dispose of waste according to applicable legislation.
Empty carefully and completely, if possible. Handle empty containers with care.
Incineration may cause explosion.

## SECTION 14: Transport information

### 14.1 UN number or ID number

ADR/RID, ADN, IMDG, IATA-DGR:
UN 1950

### 14.2 UN proper shipping name

ADR/RID, ADN, IMDG: UN 1950, AEROSOLS
IATA-DGR: UN 1950, AEROSOLS, FLAMMABLE

### 14.3 Transport hazard class(es)

ADR/RID, ADN: Class 2, Code: 5F
IMDG: Class 2.1, Subrisk -
IATA-DGR: Class 2.1


### 14.4 Packing group

ADR/RID, ADN, IATA-DGR:
not applicable
IMDG: -

### 14.5 Environmental hazards

Dangerous for the environment:
Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.
Marine pollutant - IMDG: no

### 14.6 Special precautions for user

#### Land transport (ADR/RID)

Warning board: RID: Kemmler-number 23, UN number UN 1950
Hazard label: 2.1
Special Provisions: 190 327 344 625
Limited quantities: 1 L
EQ: E0
Package - Instructions: P207 LP200
Package - Special Provisions: PP87 RR6 L2
Special provisions for packing together: MP9
Tunnel restriction code: (D)
Remarks: ADR/RID: Transport as "limited quantity" according to chapter 3.4 ADR/RID (> 8.000 kg total gross mass): Tunnel restriction code (E)

### Inland waterway craft (ADN)

| | |
|---|---|
| Hazard label: | 2.1 |
| Special Provisions: | 190 327 344 625 |
| Limited quantities: | 1 L |
| EQ: | E0 |
| Equipment necessary: | PP - EX - A |
| ventilation: | VE01,VE04 |

### Sea transport (IMDG)

| | |
|---|---|
| EmS: | F-D, S-U |
| Special Provisions: | 63 190 277 327 344 381 959 |
| Limited quantities: | 1000 mL |
| Excepted quantities: | E0 |
| Package - Instructions: | P207, LP200 |
| Package - Provisions: | PP87, L2 |
| IBC - Instructions: | - |
| IBC - Provisions: | - |
| Tank instructions - IMO: | - |
| Tank instructions - UN: | - |
| Tank instructions - Provisions: | - |
| Stowage and handling: | SW1 SW22 |
| Segregation: | SG69 |
| Properties and observations: | - |
| Segregation group: | none |

### Air transport (IATA)

| | |
|---|---|
| Hazard label: | Flamm. gas |
| Excepted Quantity Code: | E0 |
| Passenger and Cargo Aircraft: Ltd.Qty.: | Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G |
| Passenger and Cargo Aircraft: | Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg |
| Cargo Aircraft only: | Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg |
| Special Provisions: | A145 A167 A802 |
| Emergency Response Guide-Code (ERG): | 10L |

## 14.7 Maritime transport in bulk according to IMO instruments

No data available

# SECTION 15: Regulatory information

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

### National regulations - Germany

Storage class: 2B = aerosol dispensers and lighters

Water Hazard Class: 1 = slightly hazardous to water (Self-classification (mixture; calculation rule).)

Major Accident Ordinance (12. BImSchV):
Physical hazards: Number 1.2.3.1 = Code P3a,
Quantity threshold 150 000 kg / 500 000 kg

Technical guidance air: 5.2.5

Information on working limitations:

Observe employment restrictions for young people.
Observe employment restrictions for expectant or nursing mothers.

Further regulations, limitations and legal requirements:

No data available

### National regulations - EC member states

Further regulations, limitations and legal requirements:

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: refer to Germany, 12. BImSchV

Use restriction according to REACH annex XVII, no.: 3, 40

## 15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

# SECTION 16: Other information

Classification procedure: Physical hazards: On basis of test data
Health hazards: Calculation method

Wording of the H-phrases under paragraph 2 and 3:

H220 = Extremely flammable gas.
H222 = Extremely flammable aerosol.
H224 = Extremely flammable liquid and vapour.
H226 = Flammable liquid and vapour.
H229 = Pressurised container: May burst if heated.
H280 = Contains gas under pressure; may explode if heated.
H304 = May be fatal if swallowed and enters airways.
H336 = May cause drowsiness or dizziness.
H411 = Toxic to aquatic life with long lasting effects.
EUH066 = Repeated exposure may cause skin dryness or cracking.

Reason of change: Changes in section 8: Biological Limit Value
Date of first version: 25.4.2022

Department issuing data sheet:

see section 1: Department responsible for information

Abbreviations and acronyms:

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
Aerosol: Aerosol
Aquatic Chronic: Hazardous to the aquatic environment - chronic
AS/NZS: Australian Standards/New Zealand Standards
Asp. Tox.: Aspiration toxicity
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EL50: Effective loading rate 50%
EN: European Standard
EQ: Excepted quantities
EU: European Union
Flam. Gas: Flammable gases
Flam. Liq.: Flammable liquid
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
LC50: Median lethal concentration
LD50: Lethal dose 50%
LEL: Lower Explosion Limit
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD: Organisation for Economic Co-operation and Development
OEL: Occupational Exposure Limit Value
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
Press. Gas: Gases under pressure
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
STOT SE: Specific target organ toxicity - single exposure
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
UN: United Nations
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

Most recent product information is available at:
http://sumdat.net/a4zsv94e