

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

### 1.1 Product identifier

**hydraulic fluid**  
**Article number: 06161**

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

#### 1.2.1 Relevant uses

Hydraulics oil

#### 1.2.2 Uses advised against

None known.

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

**Company** Ferdinand Bilstein GmbH + Co. KG  
Wilhelmstr. 47  
58256 Ennepetal / GERMANY  
Phone +49 2333 911-0  
Fax +49 2333 911-444  
Homepage [www.febi.com](http://www.febi.com)  
E-mail [info@febi.com](mailto:info@febi.com)

#### Address enquiries to

**Technical information** [info@febi.com](mailto:info@febi.com)

**Safety Data Sheet** [info@febi.com](mailto:info@febi.com)

### 1.4 Emergency telephone number

**Advisory body** +49 (0)89-19240 (24h) (English)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Acute Tox. 4: H332 Harmful if inhaled.  
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.  
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

#### Hazard pictograms



#### Signal word

DANGER

#### Contains:

1-Decene, Dimer, hydrogenated, CAS: 68649-11-6

#### Hazard statements

H332 Harmful if inhaled.  
H304 May be fatal if swallowed and enters airways.  
H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
P331 Do NOT induce vomiting.  
P405 Store locked up.  
P501 Dispose of contents / container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

#### Special labelling

Contains: Methyl methacrylate. EUH208 May produce an allergic reaction.

### 2.3 Other hazards

<b>Physico-chemical hazards</b>	No particular hazards known.
<b>Human health dangers</b>	Frequent persistent contact with the skin can cause skin irritation. If swallowed or in the event of vomiting, risk of product entering the lungs.
<b>Environmental hazards</b>	Does not contain any PBT or vPvB substances. Contains no ingredients with endocrine-disrupting properties.
<b>Other hazards</b>	Further hazards were not determined with the current level of knowledge.  This product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
50 - < 99	1-Decene, Dimer, hydrogenated CAS: 68649-11-6
10 - < 20	Distillates (petroleum), hydrotreated light naphthenic CAS: 64742-53-6
1 - < 10	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based CAS: 72623-87-1
1 - < 10	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics CAS: 1174522-45-2
0,25 - < 1	2,6-di-tert-butyl-p-cresol CAS: 128-37-0
0,1 - < 1	Methyl methacrylate CAS: 80-62-6

**Comment on component parts** For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>General information</b>	Change soaked clothing.
<b>Inhalation</b>	Ensure supply of fresh air. In the event of symptoms seek medical treatment.
<b>Skin contact</b>	In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Get medical advice.

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

No information available.

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

If swallowed or in the event of vomiting, risk of product entering the lungs.  
Treat symptomatically.  
Forward this sheet to the doctor.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

Suitable extinguishing media	Foam, dry powder, water spray jet, carbon dioxide
Extinguishing media that must not be used	Full water jet

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

Not combusted hydrocarbons.  
Risk of formation of toxic pyrolysis products.  
Carbon monoxide (CO)

### 5.3 Advice for firefighters

Use self-contained breathing apparatus.  
Do not inhale explosion and/or combustion gases.  
Cool containers at risk with water spray jet.  
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## SECTION 6: Accidental release measures

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

High risk of slipping due to leakage/spillage of product.  
Forms slippery surfaces with water.

### 6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).  
Do not discharge into the drains/surface waters/groundwater.

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

Take up with absorbent material (e.g. general-purpose binder).  
Dispose of absorbed material in accordance with the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid formation of aerosols.  
Use only in well-ventilated areas.  
The product is combustible.  
Do not eat, drink or smoke when using this product.  
Use barrier skin cream.  
Wash face and/or hands before break and end of work.  
Cloths contaminated with product should not be kept in trouser pockets.  
Contaminated work clothing should not be allowed out of the workplace.  
Take off contaminated clothing and wash before reuse.

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

Keep only in original container.  
Prevent penetration into the ground.  
Do not store together with food and animal food/diet.  
Do not store together with oxidizing agents.  
Keep container tightly closed.  
Keep container in a well-ventilated place.  
Protect from heat/overheating.



**7.3 Specific end use(s)**

See product use, SECTION 1.2



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

**8.1 Control parameters**

**Ingredients with occupational exposure limits to be monitored (US)**

Substance
Distillates (petroleum), hydrotreated light naphthenic
CAS: 64742-53-6
Long-term exposure: 5 mg/m <sup>3</sup> , ACGIH, TWA, Oil mist, mineral (inhalable fraction)
2,6-di-tert-butyl-p-cresol
CAS: 128-37-0
Long-term exposure: 2 mg/m <sup>3</sup> , ACGIH, A4 (i, h)

**DNEL**

Substance
Distillates (petroleum), hydrotreated light naphthenic, CAS: 64742-53-6
Industrial, inhalative, Long-term - local effects, 5,4 mg/m <sup>3</sup>
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2
There are no DNEL values established for the substance.
1-Decene, Dimer, hydrogenated, CAS: 68649-11-6
Industrial, inhalative, Acute - systemic effects, 60 mg/m <sup>3</sup>
general population, inhalative, Acute - systemic effects, 50 mg/m <sup>3</sup>
Methyl methacrylate, CAS: 80-62-6
Industrial, inhalative, Long-term - systemic effects, 348,4 mg/m <sup>3</sup>
Industrial, inhalative, Long-term - local effects, 208 mg/m <sup>3</sup>
Industrial, inhalative, Acute - local effects, 416 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 13,67 mg/kg bw/day
Industrial, dermal, Long-term - local effects, 1,5 mg/cm <sup>2</sup>
general population, inhalative, Long-term - systemic effects, 74,3 mg/m <sup>3</sup>
general population, inhalative, Long-term - local effects, 104 mg/m <sup>3</sup>
general population, dermal, Long-term - systemic effects, 8,2 mg/kg bw/day
general population, dermal, Long-term - local effects, 1,5 mg/cm <sup>2</sup>
general population, oral, Long-term - systemic effects, 8,2 mg/kg bw/day
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
Industrial, inhalative, Long-term - systemic effects, 2,73 mg/m <sup>3</sup>
Industrial, inhalative, Long-term - local effects, 5,58 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day
general population, inhalative, Long-term - local effects, 1,19 mg/m <sup>3</sup>
general population, inhalative, Long-term - systemic effects, 740 µg/kg bw/day
2,6-di-tert-butyl-p-cresol, CAS: 128-37-0
Industrial, inhalative, Long-term - systemic effects, 5,8 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 8,3 mg/kg
general population, dermal, Long-term - systemic effects, 5 mg/kg
general population, inhalative, Long-term - systemic effects, 1,74 mg/m <sup>3</sup>

**PNEC**

Substance
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2
There are no PNEC values established for the substance.
Methyl methacrylate, CAS: 80-62-6



sediment (seawater), 1,02 mg/kg sediment dw
soil, 1,48 mg/kg soil dw
freshwater, 0,94 mg/L
seawater, 0,094 mg/L
sewage treatment plants (STP), 10 mg/L
sediment (freshwater), 10,2 mg/kg sediment dw
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
oral (food), 9,33 mg/kg food
2,6-di-tert-butyl-p-cresol, CAS: 128-37-0
soil, 1,04 mg/kg
sediment (freshwater), 1,29 mg/kg
oral (food), 16,7 mg/kg
freshwater, 0,004 mg/l
seawater, 0,0004 mg/l
sewage treatment plants (STP), 100 mg/l

## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation. General limit for oil mist should be noted. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
<b>Eye protection</b>	If there is a risk of splashing: Safety glasses. (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. > 0,4 mm; Nitrile rubber, >480 min (EN 374-1/-2/-3). > 0,4 mm; Neoprene, >480 min (EN 374-1/-2/-3).
<b>Skin protection</b>	light protective clothing
<b>Other</b>	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact with eyes and skin.
<b>Respiratory protection</b>	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, combination filter A-P1. (DIN EN 14387)
<b>Thermal hazards</b>	None
<b>Delimitation and monitoring of the environmental exposition</b>	See SECTION 6+7.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	green
Odor	characteristic
Odor threshold	Not applicable
pH-value	Not applicable
pH-value [1%]	Not applicable
Boiling point or initial boiling point and boiling range [°C]	No information available.
Flash point [°C]	160
Flammability	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidizing properties	No
Vapor pressure/gas pressure [kPa]	No information available.
Density [g/cm <sup>3</sup> ]	0,83
Relative density	Not determined
Bulk density [kg/m <sup>3</sup> ]	Not applicable
Solubility in water	immiscible
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	No information available.
Kinematic viscosity	18,5 mm <sup>2</sup> /s (40° C)
Relative vapour density	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature [°C]	No information available.
Decomposition temperature [°C]	No information available.
Particle characteristics	No information available.

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactions known if used as directed.

### 10.2 Chemical stability

The product is stable under standard conditions.

### 10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.  
Reactions with strong acids and alkalis.

### 10.4 Conditions to avoid

See SECTION 7.2.  
Strong heating.



### 10.5 Incompatible materials

Strong basic compounds  
strong acids  
Oxidizing agent

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.



## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute oral toxicity

Product
oral, Based on the information available, the classification criteria have not been fulfilled.
Substance
Distillates (petroleum), hydrotreated light naphthenic, CAS: 64742-53-6
LD50, oral, Rat, > 5000 mg/kg bw
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2
LD50, oral, Rat, >5000 mg/kg bw, OECD 401
1-Decene, Dimer, hydrogenated, CAS: 68649-11-6
LD50, oral, Rat, > 5000 mg/l
Methyl methacrylate, CAS: 80-62-6
LD50, oral, Rat, 7900 mg/kg
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, oral, Rat, 5000 mg/kg bw
2,6-di-tert-butyl-p-cresol, CAS: 128-37-0
LD50, oral, Rat, > 5000 mg/kg bw (OECD 401)
NOEL, oral, Rat, 25 mg/kg/28d

#### Acute dermal toxicity

Product
dermal, Based on the information available, the classification criteria have not been fulfilled.
Substance
Distillates (petroleum), hydrotreated light naphthenic, CAS: 64742-53-6
LD50, dermal, Rabbit, > 2000 mg/kg bw
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2
LD50, dermal, Rabbit, 3160 mg/kg bw
1-Decene, Dimer, hydrogenated, CAS: 68649-11-6
LD50, dermal, Rabbit, > 3000 mg/l
Methyl methacrylate, CAS: 80-62-6
LD50, dermal, Rabbit, > 5000 mg/kg
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LD50, dermal, Rabbit, 2000 - 5000 mg/kg bw
2,6-di-tert-butyl-p-cresol, CAS: 128-37-0
LD50, dermal, Rat, > 5000 mg/kg bw (OECD 402)

#### Acute inhalational toxicity

Product
ATE-mix, inhalativ (mist), 3,07 mg/l/4h
ATE-mix, inhalativ (vapor), 241,23 mg/l/4h
Substance
Distillates (petroleum), hydrotreated light naphthenic, CAS: 64742-53-6
LC50, inhalative, Rat, > 5,53 mg/l/4h (dust/mist)



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Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2
LC50, inhalative, Rat, >5.266 mg/L
1-Decene, Dimer, hydrogenated, CAS: 68649-11-6
LC50, inhalative, Rat, >1,81 mg/l 4h
Methyl methacrylate, CAS: 80-62-6
LC50, inhalative, Rat, 29,8 mg/l (4h)
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
LC50, inhalative, Rat, 2.18 - 5.53 mg/L air, 4h

**Serious eye damage/irritation** Based on the information available, the classification criteria have not been fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
Eye, non-irritating

**Skin corrosion/irritation** Based on the information available, the classification criteria have not been fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
dermal, irritant

**Respiratory or skin sensitisation** May produce an allergic reaction.  
Calculation method  
Based on the information available, the classification criteria have not been fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
dermal, sensitising
inhalative, non-sensitizing

**Specific target organ toxicity — single exposure** Based on the information available, the classification criteria have not been fulfilled.

**Specific target organ toxicity — repeated exposure** Based on the information available, the classification criteria have not been fulfilled.

Substance
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2
NOAEL, oral, Rat, 5000 mg/kg bw/day
NOAEC, inhalative, Rat, 10.4 mg/L air
Methyl methacrylate, CAS: 80-62-6
NOAEL, oral, Rat, 124 mg/kg bw/day
NOAEC, inhalative, Rat, 104 mg/m <sup>3</sup>
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
NOAEL, dermal, Rat, 30 - 2000 mg/kg bw/day
NOAEC, inhalative, Rat, 980 mg/m <sup>3</sup> air
LOAEL, oral, Rat, 125 mg/kg bw/day

**Mutagenicity** Based on the information available, the classification criteria have not been fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
in vitro, negativ
in vivo, negativ



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**Reproduction toxicity**

Based on the information available, the classification criteria have not been fulfilled.

**- Fertility**

No information available.

**- Development**

Substance
Methyl methacrylate, CAS: 80-62-6
NOAEL, oral, Rabbit, 450 mg/kg bw/day
NOAEC, inhalative, Rat, 8300 mg/m <sup>3</sup>

**Carcinogenicity**

Based on the information available, the classification criteria have not been fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
NOAEL, oral, Rat, 90,3 mg/kg bw/day
NOAEC, inhalative, Rat, 2050 mg/m <sup>3</sup>

**Aspiration hazard**

Based on the information available, the classification criteria have been fulfilled.

**General remarks**

Toxicological data of complete product are not available.  
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

## SECTION 12: Ecological information

### 12.1 Toxicity

Substance
Distillates (petroleum), hydrotreated light naphthenic, CAS: 64742-53-6
LC50, (96h), fish, > 100 mg/l
IC50, (48h), Algae, > 100 mg/l
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2
EC50, (72h), Algae, 10 g/L
NOELR, (21d), Invertebrates, 1 g/L
NOELR, (28d), fish, 1 g/L
LL50, (48h), Invertebrates, 3.193 g/L
LC100, (96h), fish, 1.028 g/L
1-Decene, Dimer, hydrogenated, CAS: 68649-11-6
EC50, (48h), Daphnia magna, > 1000 mg/l
EL50, (72h), Algae, >1000 mg/l
NOELR, (21d), Daphnia magna, 125 mg/l
LL50, (96h), Oncorhynchus mykiss, >1000 mg/l
Methyl methacrylate, CAS: 80-62-6
LC50, (96h), Oncorhynchus mykiss, > 79 mg/l OECD 203
EC50, (48h), Daphnia magna, 69 mg/l OECD 202
EC50, (72h), Selenastrum capricornutum, > 110 mg/l OECD 201
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, CAS: 72623-87-1
NOELR, (14d), fish, 1 g/L
LL50, (4d), Invertebrates, 10 g/L
LL50, (4d), fish, 100 mg/L
2,6-di-tert-butyl-p-cresol, CAS: 128-37-0
LC50, (96h), Danio rerio, > 0,57 mg/l
EC50, (48h), Daphnia magna, > 0,17 mg/l
IC50, (72h), Desmodesmus subspicatus, > 0,42 mg/l
NOEC, (21d), Daphnia magna, > 0,39 mg/l

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	Not determined
<b>Behaviour in sewage plant</b>	Not determined
<b>Biological degradability</b>	Not determined

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.



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**12.6 Endocrine disrupting properties**

Contains no ingredients with endocrine-disrupting properties.

**12.7 Other adverse effects**

Ecological data of complete product are not available.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

In according to RoHS!  
Coordinate disposal with the disposal contractor/authorities if necessary.  
Dispose of as hazardous waste.

**Contaminated packaging**

Uncontaminated packaging may be taken for recycling.  
Packaging that cannot be cleaned should be disposed of as for product.

**RCRA Hazard Class (40CFR 261)**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

**SECTION 14: Transport**

**14.1 UN number**

Transport by land according to ADR/RID Not applicable

Inland navigation (ADN) Not applicable

Marine transport in accordance with IMDG Not applicable

Air transport in accordance with IATA Not applicable

DOT Road Shipment Information (49 CFR) Not applicable

**14.2 UN proper shipping name**

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

DOT Road Shipment Information (49 CFR) Not applicable



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**14.3 Transport hazard class(es)**

Transport by land according to ADR/RID Not applicable

Inland navigation (ADN) Not applicable

Marine transport in accordance with IMDG Not applicable

Air transport in accordance with IATA Not applicable

DOT Road Shipment Information (49 CFR) Not applicable

**14.4 Packing group**

Transport by land according to ADR/RID Not applicable

Inland navigation (ADN) Not applicable

Marine transport in accordance with IMDG Not applicable

Air transport in accordance with IATA Not applicable

DOT Road Shipment Information (49 CFR) Not applicable

**14.5 Environmental hazards**

Transport by land according to ADR/RID No

Inland navigation (ADN) No

Marine transport in accordance with IMDG No

Air transport in accordance with IATA No

DOT Road Shipment Information (49 CFR) No

**14.6 Special precautions for user**

Relevant information under SECTION 6 to 8.

Not applicable

**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

#### US Regulations

<b>National regulations</b>	29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65
- SARA, 302	No information available.
- SARA, 311	No information available.
- SARA, 313	No information available.
- TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
- FDA	No information available.
<b>American Conference of Governmental Industrial Hygienists - ACGIH</b>	No information available.
<b>International Agency for Research on Cancer IARC</b>	No information available.
<b>National Toxicology Program - NTP</b>	No information available.
<b>HAP-VOC</b>	No information available.
<b>Transport-regulations</b>	DOT-Classification, ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2024)

### 15.2 Chemical safety assessment

Not applicable

## SECTION 16: Other information

### 16.1 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;  
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route;  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses;  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure;  
CAS = Chemical Abstracts Service;  
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;  
CFR = Code of Federal Regulations;  
CPR = Controlled Products Regulations;  
DMEL = Derived Minimum Effect Level;  
DNEL = Derived No Effect Level;  
DOT = Department of Transportation;  
EC50 = Median effective concentration;  
EPA = Environmental Protection Agency;  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals;  
IATA = International Air Transport Association;  
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;  
IC50 = Inhibition concentration, 50%;  
IMDG = International Maritime Code for Dangerous Goods;  
IARC = International Agency of Research on Cancer;  
IATA = International Air Transport Association;  
TSCA = Toxic Substance Control Act;  
HMIS = Hazardous Materials Identification System;  
NFPA = National Fire Protection Association;  
NIOSH = National Institute for Occupational Safety and Health;  
OSHA = Occupational Safety and Health Administration;  
LC50 = Lethal concentration, 50%;  
LD50 = Median lethal dose, 50%;  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships;  
PBT = Persistent, Bioaccumulative and Toxic substance;  
PNEC = Predicted No-Effect Concentration;  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;  
SARA = Superfund Amendments and Reauthorization Act;  
TLV@/TWA = Threshold limit value – time-weighted average;  
TLV@STEL = Threshold limit value – short-time exposure limit;  
VOC = Volatile Organic Compounds;  
vPvB = very Persistent and very Bioaccumulative;

### 16.2 Ratings



**NFPA Ratings**



TOP, FLAMMABILITY: 1 - Slight Hazard  
LEFT, HEALTH: 2 - Moderate Hazard  
RIGHT, REACTIVITY: 1 - Slight Hazard  
BOTTOM, SPECIAL NOTICE:

**HMIS Ratings**

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	1
PERSONAL PROTECTION	X

2 - Moderate Hazard  
1 - Slight Hazard  
1 - Slight Hazard  
X - Personal protection rating to be supplied by user depending on use conditions

**PERSONAL PROTECTION:**

- A - Safety Glasses
- B - Safety Glasses and Gloves
- C - Safety Glasses, Gloves and Protection Apron
- D - Face Shield, Gloves and Protection Apron
- E - Safety Glasses, Gloves and Dust Respirator
- F - Safety Glasses, Gloves, Protection Apron and Dust Respirator
- G - Safety Glasses, Gloves and Vapor Respirator.
- H - Splash Goggles, Gloves, Protection Apron and Vapor Respirator.
- I - Safety Glasses, Gloves, Dust Respirator and Vapor Respirator.
- J - Splash Goggles, Gloves, Protection Apron, Dust Respirator and Vapor Respirator.
- K - Airline Mask or Hood, Gloves, Full Suit and Boots.
- X - Personal protection rating to be supplied by user depending on use conditions

**Modified position**

3.2