

SAFETY DATA SHEET

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

Revision date: 6 Dec 2024

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Version: 3



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Mabanol Metall Passivator

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

1.1. Product identifier

Trade name/designation:

Mabanol Metall Passivator

UFI:

KMR1-U4J5-68HW-EF9J

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

Use of the substance/mixture:

Metalworking fluids

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

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Mabanol GmbH & Co. KG

Am Strandkai 1

20457 Hamburg

Germany

Telephone: 0049 (0) 40 36809988

E-mail: info@mabanol.com

Website: www.mabanol.com

E-mail (competent person): giznord@giz-nord.de

* 1.4. Emergency telephone number

Giftinformationszentrale Göttingen , 24h: 0049 (0) 551 1 92 40

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	

2.2. Label elements

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

Hazard pictograms:



GHS07

Exclamation mark

Signal word: Warning

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Hazard components for labelling:

1H-1,2,3-benzotriazole; 2-(2-butoxyethoxy)ethanol

Hazard statements for health hazards

H319 Causes serious eye irritation.

Hazard statements for environmental hazards

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

Additional information:

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

2.3. Other hazards

Other adverse effects:

Processing vapours can irritate the respiratory tracts, skin and eyes.

SECTION 3: Composition/information on ingredients

* 3.2. Mixtures

Description:

Mixture of substances listed below and other non-classified substances.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 112-34-5 EC No.: 203-961-6 Index No.: 603-096-00-8 REACH No.: 01-2119475104-44	2-(2-butoxyethoxy)ethanol Eye Irrit. 2 (H319) ⚠ Warning Acute Toxicity Estimate ATE (oral) 3,384 mg/kg ATE (dermal) 2,764 mg/kg ATE (inhalation, vapour) 3 mg/L	≥ 75 - < 80 weight-%
CAS No.: 95-14-7 EC No.: 202-394-1 REACH No.: 01-2119979079-20	1H-1,2,3-benzotriazole Acute Tox. 4 (H302), Aquatic Chronic 2 (H411), Eye Irrit. 2 (H319) ⚠⚠ Warning Acute Toxicity Estimate ATE (oral) 500 mg/kg	20 - < 25 weight-%

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). When in doubt or if symptoms are observed, get medical advice. If unconscious but breathing normally, place in recovery position and seek medical advice.

Following inhalation:

Remove victim out of the danger area. Remove casualty to fresh air and keep warm and at rest. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

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In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing.

After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

Following ingestion:

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Foam. Extinguishing powder. Carbon dioxide (CO₂). Water spray jet. Water mist.

Unsuitable extinguishing media:

Full water jet.

* 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:

In case of fire: Gases/vapours, toxic.

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

5.3. Advice for firefighters

Do not inhale explosion and combustion gases. Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. Remove persons to safety.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Remove persons to safety. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8.

6.2. Environmental precautions

Cover drains. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Make sure spills can be contained, e.g. in sump pallets or kerbed areas. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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. If this cannot be done, allow fire to burn under control. Prevent spread over a wide area (e.g. by containment or oil barriers).

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For cleaning up:

Wipe up with absorbent material (eg. cloth, fleece). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8). Use only in well-ventilated areas. Handle and open container with care. Always close containers tightly after the removal of product. Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray. Keep away from sources of ignition - No smoking.

Fire prevent measures:

Only use the material in places where open light, fire and other flammable sources can be kept away. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Take precautionary measures against static discharges.

Environmental precautions:

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Shafts and sewers must be protected from entry of the product.

Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin. Wash hands before breaks and after work. Do not put any product-impregnated cleaning rags into your trouser pockets. Use protective skin cream before handling the product. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product. Protect containers against damage.

Packaging materials:

Ground and bond container and receiving equipment. Floors should be impervious, resistant to liquids and easy to clean.

Hints on storage assembly:

Keep away from: Oxidizing agent.

Do not store together with: Food and feedingstuffs.

Storage class (TRGS 510, Germany): 10 - Combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Recommended storage temperature: 5 - 40°C.

Protect against: Frost. Heat. UV-radiation/sunlight. Water. Humidity.

storage stability: max. 24 month(s).

7.3. Specific end use(s)

No data available

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SECTION 8: Exposure controls/personal protection

* 8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE) from 1 Mar 2011	2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	① 10 ppm (67 mg/m ³) ② 15 ppm (100.5 mg/m ³) ⑤ (Aerosol und Dampf) EU, DFG, Y, 11
IOELV (EU)	2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	① 10 ppm (67.5 mg/m ³) ② 15 ppm (101.2 mg/m ³)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	67.5 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	20 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
1H-1,2,3-benzotriazole CAS No.: 95-14-7 EC No.: 202-394-1	10 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
1H-1,2,3-benzotriazole CAS No.: 95-14-7 EC No.: 202-394-1	1.08 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	1 mg/L	① PNEC aquatic, freshwater
2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	0.1 mg/L	① PNEC aquatic, marine water
2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	200 mg/L	① PNEC sewage treatment plant
2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	4 mg/kg	① PNEC sediment, freshwater
2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6	0.4 mg/kg	① PNEC sediment, marine water
1H-1,2,3-benzotriazole CAS No.: 95-14-7 EC No.: 202-394-1	0.0194 mg/L	① PNEC aquatic, freshwater
1H-1,2,3-benzotriazole CAS No.: 95-14-7 EC No.: 202-394-1	0.0194 mg/L	① PNEC aquatic, marine water

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Substance name	PNEC Value	① PNEC type
1H-1,2,3-benzotriazole CAS No.: 95-14-7 EC No.: 202-394-1	39.4 mg/L	① PNEC sewage treatment plant
1H-1,2,3-benzotriazole CAS No.: 95-14-7 EC No.: 202-394-1	0.00375 mg/ kg	① PNEC sediment, freshwater

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Use only in well-ventilated areas. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection (EN 166).

Skin protection:

Tested protective gloves must be worn (EN ISO 374).

Wearing time with permanent contact:

Suitable material: NBR (Nitrile rubber). CR (polychloroprene, chloroprene rubber).

Thickness of the glove material: 0,70 mm. Breakthrough time:: > 480 min.

Wearing time with occasional contact (splashes):

Suitable material: NBR (Nitrile rubber). CR (polychloroprene, chloroprene rubber).

Thickness of the glove material: 0,40 mm. Breakthrough time:: > 30 min.

Breakthrough times and swelling properties of the material must be taken into consideration. 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.

Respiratory protection:

Usually no personal respiratory protection necessary.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Respiratory protection necessary at: exceeding exposure limit values. insufficient ventilation. aerosol or mist formation. Suitable respiratory protection apparatus: Combination filtering device.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

* 9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: yellow

Odour: not determined

flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	6 - 7	20 °C	② 1 weight-%
Melting point	No data available		
Freezing point	No data available		
Initial boiling point and boiling range	> 180 °C		② 1013 hPa
Flash point	115 °C		① EN ISO 2592
Evaporation rate	No data available		
Auto-ignition temperature	> 220 °C		

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Parameter	Value	at °C	① Method ② Remark
Upper/lower flammability or explosive limits	No data available		
Vapour pressure	No data available		
Vapour density	No data available		
Density	1.02 g/cm ³	15 °C	① DIN EN ISO 12185
Bulk density	not applicable		
Water solubility	miscible		
Dynamic viscosity	No data available		
Kinematic viscosity	14 mm ² /s	20 °C	① EN ISO 3104

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Only use the material in places where open light, fire and other flammable sources can be kept away.

10.5. Incompatible materials

Oxidising agent, strong.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6
LD₅₀ oral: 3,384 mg/kg (Rat)
LD₅₀ dermal: 2,764 mg/kg (Rabbit)
LC₅₀ Acute inhalation toxicity (vapour): 3 mg/L 2 h (Rat)

Acute oral toxicity:

No data available. The statement is derived from the properties of the single components.
Based on available data, the classification criteria are not met.

Acute dermal toxicity:

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

Acute inhalation toxicity:

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

Skin corrosion/irritation:

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

Serious eye damage/irritation:

Irritating to eyes.

Respiratory or skin sensitisation:

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

Germ cell mutagenicity:

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

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Carcinogenicity:

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

Reproductive toxicity:

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

STOT-single exposure:

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

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.

Additional information:

Frequently or prolonged contact with skin may cause dermal irritation.

11.2. Information on other hazards

Endocrine disrupting properties:

No information available.

Other information:

Processing vapours can irritate the respiratory tracts, skin and eyes.

SECTION 12: Ecological information

12.1. Toxicity

2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6
--

LC ₅₀ : 1,300 mg/L 4 d (fish, <i>Lepomis macrochirus</i> (Bluegill))

EC ₅₀ : >100 mg/L 2 d (crustaceans, <i>Daphnia magna</i> (Big water flea))

EC ₅₀ : >100 mg/L 4 d (Algae/water plant, <i>Desmodesmus subspicatus</i>)

1H-1,2,3-benzotriazole CAS No.: 95-14-7 EC No.: 202-394-1
--

LC ₅₀ : 180 mg/L 4 d (fish, <i>Danio rerio</i> (zebrafish))
--

EC ₅₀ : 15.8 mg/L 2 d (crustaceans, <i>Daphnia magna</i> (Big water flea))

EC ₅₀ : 75 mg/L 3 d (Algae/water plant, <i>Pseudokirchneriella subcapitata</i>)

Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

Additional ecotoxicological information:

There are no data available on the mixture itself. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

Do not allow uncontrolled discharge of product into the environment.

12.2. Persistence and degradability

Biodegradation:

Part of the components is biodegradable.

12.3. Bioaccumulative potential

Accumulation / Evaluation:

No indication of bioaccumulation potential.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5 EC No.: 203-961-6
--

Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

1H-1,2,3-benzotriazole CAS No.: 95-14-7 EC No.: 202-394-1
--

Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No information available.

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12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

12 01 99	Wastes not otherwise specified
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Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal. Recycle according to official regulations.

Appropriate disposal / Package:

Non-contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of. Dispose of waste according to applicable legislation.

13.2. Additional information

Never use pressure to empty container. Do not allow uncontrolled discharge of product into the environment.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es)			
not relevant	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant

14.7. Maritime transport in bulk according to IMO instruments

not relevant.

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Use restriction according to REACH annex XVII, no.: 3. 55. 75.

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Other regulations (EU):

This product is not assigned to a hazard category.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]: No information available.

Observe in addition any national regulations!

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 76 weight-%

15.1.2. National regulations

[DE] National regulations

Störfallverordnung (12. BImSchV)

for substances contained in the product:

This product is not assigned to a hazard category.

Technische Anleitung zur Reinhaltung der Luft (TA-Luft)

Remark:

No flammable liquid according to BetrSichV.

Water hazard class

WGK:

2 - obviously hazardous to water

Remark:

Self-classification (mixture; calculation rule).

15.2. Chemical Safety Assessment

No information available.

15.3. Additional information

Water hazard class (WGK): 2 (obviously hazardous to water).

SECTION 16: Other information

* 16.1. Indication of changes

1.3.	Details of the supplier of the safety data sheet
1.4.	Emergency telephone number
3.2.	Mixtures
5.2.	Special hazards arising from the substance or mixture
8.1.	Control parameters
9.1.	Information on basic physical and chemical properties
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
14.3.	Transport hazard class(es)
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.5.	List of relevant hazard statements and/or precautionary statements from sections 2 to 15

16.2. Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: Accord européen sur le transport des marchandises dangereuses par Route (International Carriage of Dangerous Goods by Road)

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS Chemical Abstracts Service

DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

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LC₅₀: Lethal concentration, 50 percent

LD₅₀: Lethal dose, 50 percent

NIOSH: National Institute of Occupational Safety and Health

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OEL: Occupational Exposure limit (Arbeitsplatzgrenzwert)

OSHA: Occupational Safety and Health Administration

PEL: permissible exposure limit (Zulässiger Expositionsgrenzwert)

PBT: persistent bioaccumulative toxic

PNEC: predicted no effect concentration

REL: Recommended exposure limit (Empfohlene Expositionsgrenze)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

STEL: Short Term Exposure Limit (Kurzzeitgrenzwert) (15 min)

SVHC: substance of very high concern

TLV: Threshold Limit Values (Schwellwert Grenzwerte)

TRGS Technische Regeln für Gefahrstoffe

TSCA: Toxic Substances Control Act

TWA: Time Weighted Average (Zeitlich gewichteter Mittelwert) (8 h)

VOC: Volatile Organic Compounds

vPvB: very persistent and very bioaccumulative

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment (<i>Aquatic Chronic 3</i>)	H412: Harmful to aquatic life with long lasting effects.	

* 16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

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.

* Data changed compared with the previous version.