Mabanol Grind 13 G

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

1.1. Product identifier

Trade name/designation:

Mabanol Grind 13 G

UFI:
PA6V-RE88-0TQT-AXYA

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
Koreastraße 7
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
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	
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:

GHS08
Health hazard

Signal word: Danger

Hazard components for labelling:
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine; Amines, C12-14-tert-alkyl, mixed sec-Bu and iso-Bu phosphates; C18-C50 branched, cyclic and linear hydrocarbons – Distillates

Hazard statements for health hazards	
H304	May be fatal if swallowed and enters airways.

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention	
P273	Avoid release to the environment.

Precautionary statements Response	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/Emergency telephone number.
P331	Do NOT induce vomiting.

Precautionary statements Storage	
P405	Store locked up.

Precautionary statements Disposal	
P501	Dispose of contents/container to Dispose of waste according to applicable legislation..

2.3. Other hazards
No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Description:
Mixture of base oils and additives.

Additional information:
The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 848301-69-9 **EC No.:** 482-220-0 **REACH No.:** 01-0000020163-82	**C18-C50 branched, cyclic and linear hydrocarbons – Distillates** Asp. Tox. 1 (H304) **Danger**	75 – < 80 weight-%
CAS No.: 110-25-8 **EC No.:** 203-749-3	**(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine** Acute Tox. 4 (H332), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Irrit. 2 (H315) **Danger**	0.5 – < 1 weight-%
CAS No.: 96690-34-5 **EC No.:** 306-227-4 **REACH No.:** 01-2120769710-51	**Amines, C12-14-tert-alkyl, mixed sec-Bu and iso-Bu phosphates** Acute Tox. 4 (H302), Aquatic Chronic 2 (H411), Eye Dam. 1 (H318), Skin Corr. 1B (H314) **Danger**	< 0.5 weight-%
CAS No.: 128-37-0 **EC No.:** 204-881-4 **REACH No.:** 01-2119565113-46	**2,6-di-tert-butyl-p-cresol** Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410) **Warning** M-factor (acute): 1 M-factor (chronic): 1	< 0.25 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:
When in doubt or if symptoms are observed, get medical advice.

Following inhalation:
Remove casualty to fresh air and keep warm and at rest. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

In case of skin contact:
After contact with skin, wash immediately with plenty of water and soap. Change contaminated, saturated clothing. In case of skin irritation, consult a physician.

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:
Do NOT induce vomiting. Call a physician immediately. Rinse mouth thoroughly with water.Where appropriate artificial ventilation. Observe risk of aspiration if vomiting occurs.

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

The following symptoms may occur: Cough. Dyspnoea. Respiratory complaints. Fever. Vomiting. Pneumonia.
Symptoms can occur only after several hours.

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

Unsuitable extinguishing media:
Full water jet.

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

Hazardous combustion products:
In case of fire: Gases/vapours, toxic. In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides (NOx). Sulphur oxides.

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

Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:
Use personal protection equipment. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Ventilate affected area. Keep away from sources of ignition - No smoking.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8.

6.2. Environmental precautions

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:

Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up:

Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

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. Always close containers tightly after the removal of product. Avoid contact with skin, eyes and clothes. Avoid: Inhalation of vapours or spray/mists. Keep away from sources of ignition - No smoking.

Fire prevent measures:

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Environmental precautions:

Do not allow to enter into surface water or drains.

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. Apply skin care products after work. Do not put any product-impregnated cleaning rags into your trouser pockets. Used working clothes should not be worn outside the work area. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

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

Hints on storage assembly:

Do not store together with: Food and feedingstuffs.
Keep away from: Oxidizing agent.

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: ~ 24 month(s).

7.3. Specific end use(s)

No data available

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)	(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	① 0.05 mg/m³ ② 0.1 mg/m³ ⑤ (einatembare Fraktion) DFG
TRGS 900 (DE)	2,6-di-tert-butyl-p-cresol **CAS No.:** 128-37-0 **EC No.:** 204-881-4	① 10 mg/m³ ② 40 mg/m³ ⑤ (Aerosol und Dampf, einatembare Fraktion) DFG, Y, 11

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
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	0.2 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	0.1 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	0.01 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	0.005 mg/m³	① DNEL Consumer ② Long-term – inhalation, local effects
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	10 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	5 mg/kg	① DNEL Consumer ② Long-term - dermal, systemic effects
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	100 mg/kg bw/day	① DNEL worker ② Acute – dermal, systemic effects
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	50 mg/kg bw/day	① DNEL Consumer ② Acute – dermal, systemic effects
2,6-di-tert-butyl-p-cresol **CAS No.:** 128-37-0 **EC No.:** 204-881-4	5.8 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
2,6-di-tert-butyl-p-cresol **CAS No.:** 128-37-0 **EC No.:** 204-881-4	8.3 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	0.00043 mg/L	① PNEC aquatic, freshwater
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	0.000043 mg/L	① PNEC aquatic, marine water
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine **CAS No.:** 110-25-8 **EC No.:** 203-749-3	13 mg/L	① PNEC sewage treatment plant
2,6-di-tert-butyl-p-cresol **CAS No.:** 128-37-0 **EC No.:** 204-881-4	0.004 mg/L	① PNEC aquatic, freshwater
2,6-di-tert-butyl-p-cresol **CAS No.:** 128-37-0 **EC No.:** 204-881-4	0.0004 mg/L	① PNEC aquatic, marine water
2,6-di-tert-butyl-p-cresol **CAS No.:** 128-37-0 **EC No.:** 204-881-4	100 mg/L	① PNEC sewage treatment plant
2,6-di-tert-butyl-p-cresol **CAS No.:** 128-37-0 **EC No.:** 204-881-4	1.29 mg/kg	① PNEC sediment, freshwater

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate ventilation. 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). PVA (Polyvinyl alcohol).
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). PVA (Polyvinyl alcohol).
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 respirative protection necessary.
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
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:** brown
Odour: not determined

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*not determined*		
Melting point	*not determined*		
Freezing point	*not determined*		
Initial boiling point and boiling range	> 220 °C		② 1013 hPa
Decomposition temperature	*not determined*		
Flash point	180 °C		① EN ISO 2592
Evaporation rate	*not determined*		
Auto-ignition temperature	> 220 °C		
Upper/lower flammability or explosive limits	0.6 – 6.5 Vol-%		
Vapour pressure	*not determined*		
Vapour density	*not determined*		
Density	0.834 g/cm³	15 °C	① DIN EN ISO 12185
Relative density	*not determined*		
Bulk density	*not determined*		
Water solubility	practically insoluble	20 °C	
Partition coefficient: n-octanol/water	*not determined*		
Dynamic viscosity	*not determined*		
Kinematic viscosity	12.5 mm²/s	40 °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 stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions
No known hazardous reactions.

10.4. Conditions to avoid
No information available.

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

C18-C50 branched, cyclic and linear hydrocarbons – Distillates	**CAS No.:** 848301-69-9 **EC No.:** 482-220-0
LD_{50} oral: >5,000 mg/kg (Rat)	
LD_{50} dermal: >5,000 mg/kg (Rabbit)	
LC_{50} Acute inhalation toxicity (vapour): >5 mg/L 4 h (Rat)	
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	**CAS No.:** 110-25-8 **EC No.:** 203-749-3
LD_{50} oral: 9,200 mg/kg (Rat)	
LC_{50} Acute inhalation toxicity (vapour): 1.37 mg/L 4 h (Rat)	

Acute oral toxicity:
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:
Based on available data, the classification criteria are not met.

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.

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:
May be fatal if swallowed and enters airways. For viscosity data, see section 9.

Additional information:
Frequently or prolonged contact with skin may cause dermal irritation.

11.2. Information on other hazards

Endocrine disrupting properties:
No information available.

SECTION 12: Ecological information

12.1. Toxicity

C18-C50 branched, cyclic and linear hydrocarbons – Distillates	**CAS No.:** 848301-69-9 **EC No.:** 482-220-0
LC_{50}: >100 mg/L (fish)	
EC_{50}: >100 mg/L (crustaceans)	
EC_{50}: >100 mg/L (Algae/water plant)	

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	**CAS No.:** 110-25-8 **EC No.:** 203-749-3
LC_{50}: 3.2 – 4.6 mg/L 4 d (fish)	
LC_{50}: 9.3 mg/L 4 d (fish, Leuciscus idus (golden orfe))	
EC_{50}: 6.3 mg/L 3 d (Algae/water plant, Scenedesmus subspicatus)	
EC_{50}: 0.43 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202	
EC_{50}: 0.53 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202	
EC_{50}: 5.1 mg/L 3 d (Algae/water plant)	
NOEC: 0.91 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)	
NOEC: 0.38 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202	
NOEC: 6.81 mg/L 4 d (fish, Leuciscus idus (golden orfe))	
2,6-di-tert-butyl-p-cresol	**CAS No.:** 128-37-0 **EC No.:** 204-881-4
LC_{50}: >0.57 mg/L 4 d (fish, Danio rerio (zebrafish))	
EC_{50}: >0.17 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))	
IC_{50}: >0.42 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)	

Aquatic toxicity:
Harmful to aquatic life.

Additional ecotoxicological information:
No data available. 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

Abiotic degradation:
The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

Biodegradation:
Moderately/partially biodegradable.

12.3. Bioaccumulative potential

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	**CAS No.:** 110-25-8 **EC No.:** 203-749-3
Log K_{OW}: 6.83	

Bioconcentration factor (BCF):
No indication of bioaccumulation potential.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

C18-C50 branched, cyclic and linear hydrocarbons – Distillates	**CAS No.:** 848301-69-9 **EC No.:** 482-220-0
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.	
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	**CAS No.:** 110-25-8 **EC No.:** 203-749-3
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.	
Amines, C12-14-tert-alkyl, mixed sec-Bu and iso-Bu phosphates	**CAS No.:** 96690-34-5 **EC No.:** 306-227-4
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.	
2,6-di-tert-butyl-p-cresol	**CAS No.:** 128-37-0 **EC No.:** 204-881-4
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.

12.7. Other adverse effects

Damage can be caused through mechanical influence of the product (eg. sticking).

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 07 *	mineral-based machining oils free of halogens (except emulsions and solutions)

**: Evidence for disposal must be provided.*

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.

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

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.
Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]: No information available.
Directive 2004/42/EC on the limitation of emissions of volatile organic compounds: No information available.
Observe in addition any national regulations!

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:

Weight fraction (Number 5.2.5. I): < 5%

Water hazard class

WGK:

1 - schwach wassergefährdend

Remark:

Self-classification (mixture; calculation rule).

Other regulations, restrictions and prohibition regulations

No flammable liquid according to BetrSichV.

15.2. Chemical Safety Assessment

No information available.

SECTION 16: Other information

16.1. Indication of changes

No data available

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
LC_{50}: Lethal concentration, 50 percent
LD_{50}: 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 imit (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
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
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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.