

SAFETY DATA SHEET

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

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Mabanol Einspritzanlagenreiniger Diesel

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

1.1. Product identifier

Trade name/designation:

Mabanol Einspritzanlagenreiniger Diesel

Other means of identification:

Mabanol Direct Injection Diesel Engine Cleaner

UFI:

EN47-XR5U-9H6V-463P

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

Use of the substance/mixture:

Industrial uses

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

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 (<i>Asp. Tox. 1</i>)	H304: May be fatal if swallowed and enters airways.	
Skin corrosion/irritation (<i>Skin Irrit. 2</i>)	H315: Causes skin irritation.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
STOT-single exposure (<i>STOT SE 3</i>)	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment (<i>Aquatic Chronic 2</i>)	H411: Toxic 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



GHS08

Health hazard



GHS09

Environment

Signal word: Danger

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Hazard components for labelling:

naphthalene; 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol; (Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine; morpholine

hazard statements for health hazards

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Hazard statements for environmental hazards

H411	Toxic to aquatic life with long lasting effects.
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Precautionary statements Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response

P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/... if you feel unwell.

2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 64742-81-0 EC No.: 265-184-9 REACH No.: 01-2119462828-25	Kerosine (petroleum), hydrodesulfurized Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), STOT SE 3 (H336), Skin Irrit. 2 (H315) Danger	50 - ≤ 100 weight-%
CAS No.: 27247-96-7 EC No.: 248-363-6	2-ethylhexyl nitrate Acute Tox. 4 (H302, H312, H332), Aquatic Chronic 2 (H411) Warning	5 - < 10 weight-%
CAS No.: 64742-94-5 EC No.: 265-198-5 REACH No.: 01-2119463588-24	Solvent naphtha (petroleum), heavy arom. Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), STOT SE 3 (H336) Danger	1 - ≤ 3 weight-%
CAS No.: 104-76-7 EC No.: 203-234-3 REACH No.: 01-2119487289-20	2-ethylhexan-1-ol Acute Tox. 4 (H332), Eye Irrit. 2 (H319), STOT SE 3 (H335), Skin Irrit. 2 (H315) Warning	1 - ≤ 3 weight-%
CAS No.: 95-38-5 EC No.: 202-414-9 REACH No.: 01-2119777867-13	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), STOT RE 2 (H373), Skin Corr. 1C (H314) Danger M-factor (acute): 1 M-factor (chronic): 10	1 - ≤ 3 weight-%

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product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 110-25-8 EC No.: 203-749-3 REACH No.: 01-2119488991-20	(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine Acute Tox. 4 (H332), Aquatic Acute 1 (H400), Eye Dam. 1 (H318), Skin Irrit. 2 (H315) Danger	1 - ≤ 3 weight-%
CAS No.: 110-91-8 EC No.: 203-815-1 REACH No.: 01-2119496057-30	morpholine Acute Tox. 3 (H311, H331), Acute Tox. 4 (H302), Eye Dam. 1 (H318), Flam. Liq. 3 (H226), Skin Corr. 1B (H314) Danger	0.1 - ≤ 1 weight-%
CAS No.: 91-20-3 EC No.: 202-049-5 REACH No.: 01-2119561346-37	naphthalene Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Carc. 2 (H351) Warning	0.1 - ≤ 1 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).

Following inhalation:

Provide fresh air.

In case of skin contact:

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing. And wash it before reuse. Medical treatment necessary.

After eye contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Following ingestion:

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

Full water jet.

5.2. Special hazards arising from the substance or mixture

Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

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. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

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.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

* **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). Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

Fire prevent measures:

Usual measures for fire prevention.

Keep away from sources of ignition - No smoking.

Advices on general occupational hygiene

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only.

Provide adequate ventilation as well as local exhaust at critical locations.

Hints on storage assembly:

No special measures are necessary.

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

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)	Kerosine (petroleum), hydrod esulfurized CAS No.: 64742-81-0 EC No.: 265-184-9	① 50 mg/m ³ ② 100 mg/m ³ ⑤ (C9-C14 Aromaten)
TRGS 900 (DE)	Solvent naphtha (petroleum), heavy arom. CAS No.: 64742-94-5 EC No.: 265-198-5	① 50 mg/m ³ ② 100 mg/m ³ ⑤ (C9-C14 Aromaten)
TRGS 900 (DE)	2-ethylhexan-1-ol CAS No.: 104-76-7 EC No.: 203-234-3	① 10 ppm (54 mg/m ³) ② 10 ppm (54 mg/m ³) ⑤ (Aerosol und Dampf)
IOELV (EU)	2-ethylhexan-1-ol CAS No.: 104-76-7 EC No.: 203-234-3	① 1 ppm (5.4 mg/m ³)
TRGS 900 (DE)	(Z)-N-methyl-N-(1-oxo-9-octa decenyl)glycine CAS No.: 110-25-8 EC No.: 203-749-3	① 0.05 mg/m ³ ② 0.1 mg/m ³ ⑤ (einatembare Fraktion)
TRGS 900 (DE)	morpholine CAS No.: 110-91-8 EC No.: 203-815-1	① 10 ppm (36 mg/m ³) ② 20 ppm (72 mg/m ³) ⑤ (kann über die Haut aufgenommen werden)
IOELV (EU)	morpholine CAS No.: 110-91-8 EC No.: 203-815-1	① 10 ppm (36 mg/m ³) ② 20 ppm (72 mg/m ³)
DFG (DE)	morpholine CAS No.: 110-91-8 EC No.: 203-815-1	① 5 ppm (18 mg/m ³) ② 5 ppm (18 mg/m ³) ③ 10 ppm (36 mg/m ³)
TRGS 900 (DE)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 0.4 ppm (2 mg/m ³) ② 1.6 ppm (8 mg/m ³) ⑤ (Aerosol und Dampf, kann über die Haut aufgenommen werden)
IOELV (EU)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m ³)

8.1.2. Biological limit values

No data available

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8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.46 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	14 mg/m ³	① DNEL worker ② Acute - inhalation, systemic effects
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.06 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0 mg/l	① PNEC aquatic, freshwater
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0 mg/l	① PNEC aquatic, marine water
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.27 mg/l	① PNEC sewage treatment plant
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.376 mg/kg	① PNEC sediment, freshwater
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.038 mg/kg	① PNEC sediment, marine water

* 8.2. Exposure controls

8.2.1. Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection (EN 166).

Skin protection:

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

Wear suitable protective clothing.

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

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

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Safety relevant basis data

parameter		at °C	Method	Remark
pH	<i>not determined</i>			
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	100 °C			
Decomposition temperature	<i>not determined</i>			
Flash point	62 °C		ISO 3679	
Evaporation rate	<i>not determined</i>			
Auto-ignition temperature	<i>not determined</i>			
Upper/lower flammability or explosive limits	1.2 - 8.8 Vol-%			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Density	0.832 g/cm ³	20 °C	DIN 51757	
Relative density	<i>not determined</i>			
Bulk density	<i>not determined</i>			
Water solubility	The study does not need to be conducted because the substance is known to be insoluble in water.			
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	< 7 mm ² /s	40 °C	DIN EN ISO 3104	

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

Further information

Do not mix with other chemicals.

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SECTION 11: Toxicological information

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

Substance name	Toxicological information
Kerosine (petroleum), hydrodesulfurized CAS No.: 64742-81-0 EC No.: 265-184-9	LD₅₀ oral: >5,000 mg/kg (Rat) LD₅₀ dermal: >2,000 mg/kg (Rabbit) LC₅₀ Acute inhalation toxicity (vapour): 5.28 mg/l 4 h (Rat)
2-ethylhexyl nitrate CAS No.: 27247-96-7 EC No.: 248-363-6	LD₅₀ oral: >9,640 mg/kg (Rat) LD₅₀ dermal: >4,820 mg/kg (Rabbit) LC₅₀ Acute inhalation toxicity (vapour): 11 mg/l 4 h (Rat) ATE inhalativ Dämpfe: 1.5 mg/l
Solvent naphtha (petroleum), heavy arom. CAS No.: 64742-94-5 EC No.: 265-198-5	LD₅₀ oral: >2,000 mg/kg (Rat) LD₅₀ dermal: >2,000 mg/kg (Rabbit) LC₅₀ Acute inhalation toxicity (vapour): >5 mg/l 4 h (Rat)
2-ethylhexan-1-ol CAS No.: 104-76-7 EC No.: 203-234-3	LD₅₀ oral: 2,047 mg/kg (Rat) LD₅₀ dermal: >3,000 mg/kg (Rat) LC₅₀ Acute inhalation toxicity (vapour): 11 mg/l 4 h (Rat) ATE inhalativ Dämpfe: 1.5 mg/l
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	LD₅₀ oral: 1,265 mg/kg (Rat) LD₅₀ dermal: >2,000 mg/kg (Rabbit)
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine CAS No.: 110-25-8 EC No.: 203-749-3	LD₅₀ oral: 9,200 mg/kg (Rat) ATE inhalativ Dämpfe: 11 mg/l LC₅₀ Acute inhalation toxicity (vapour): 1.37 mg/l 4 h (Rat)
morpholine CAS No.: 110-91-8 EC No.: 203-815-1	LD₅₀ oral: 1,900 mg/kg (Rat) LD₅₀ dermal: 500 mg/kg (Rabbit) LC₅₀ Acute inhalation toxicity (vapour): 8 mg/l 4 h (Rat) LC₅₀ Acute inhalation toxicity (gas): 8,000 ppmV 4 h (Rat) ATE inhalativ Dämpfe: 0.5 mg/l

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Substance name	Toxicological information
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	LD₅₀ oral: >2,000 mg/kg (Rat) LD₅₀ dermal: >2,000 mg/kg (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:

Causes skin irritation.

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation:

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

Germ cell mutagenicity:

No indications of human germ cell mutagenicity exist.

Carcinogenicity:

No indication of human carcinogenicity.

Reproductive toxicity:

No indications of human reproductive toxicity exist.

STOT-single exposure:

May cause drowsiness or dizziness. (Kerosine (petroleum), hydrodesulfurized; Solvent naphtha (petroleum), heavy arom; KEROSENE)

STOT-repeated exposure:

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

Aspiration hazard:

May be fatal if swallowed and enters airways.

Additional information:

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

* **11.2. Information on other hazards**

Endocrine disrupting properties:

No information available.

Other information:

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

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SECTION 12: Ecological information

* 12.1. Toxicity

Substance name	Toxicological information
Kerosine (petroleum), hydrodesulfurized CAS No.: 64742-81-0 EC No.: 265-184-9	LC₅₀ : 2 - 5 mg/l 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) ErC₅₀ : >1 mg/l 3 d (Algae/water plant, Pseudokirchneriella subcapitata) EC₅₀ : 1.4 mg/l 2 d (crustaceans, Daphnia magna (Big water flea))
2-ethylhexyl nitrate CAS No.: 27247-96-7 EC No.: 248-363-6	LC₅₀ : 2 mg/l 4 d (fish, Danio rerio (zebrafish)) ErC₅₀ : >1 - 10 mg/l 3 d (Algae/water plant) EC₅₀ : <10 mg/l 2 d (crustaceans, Daphnia magna (Big water flea))
Solvent naphtha (petroleum), heavy arom. CAS No.: 64742-94-5 EC No.: 265-198-5	LC₅₀ : >1 mg/l 4 d (fish, Pimephales promelas (fathead minnow)) ErC₅₀ : >1 mg/l 4 d (Algae/water plant, Scenedesmus subspicatus) EC₅₀ : 1.4 mg/l 2 d (crustaceans, Daphnia magna (Big water flea))
2-ethylhexan-1-ol CAS No.: 104-76-7 EC No.: 203-234-3	LC₅₀ : 17.1 mg/l 4 d (fish, Leuciscus idus (golden orfe)) ErC₅₀ : 11.5 mg/l 3 d (Algae/water plant, Scenedesmus subspicatus) EC₅₀ : 39 mg/l 2 d (crustaceans, Daphnia magna (Big water flea))
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	EC₅₀ : 0.163 mg/l (crustaceans, Daphnia magna (Big water flea)) LC₅₀ : 0.3 mg/l (fish) EC₅₀ : 0.0169 mg/l 3 d (Algae/water plant, Scenedesmus subspicatus, Desmodesmus subspicatus) NOEC : 0.014 mg/l (Algae/water plant) EC₅₀ : 0.03 mg/l 3 d (Algae/water plant)
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine CAS No.: 110-25-8 EC No.: 203-749-3	LC₅₀ : 3.2 - 4.6 mg/l 4 d (fish, Leuciscus idus (golden orfe)) ErC₅₀ : 5.1 mg/l 3 d (Algae/water plant, Scenedesmus subspicatus) EC₅₀ : 0.53 mg/l 2 d (crustaceans, Daphnia magna (Big water flea))
morpholine CAS No.: 110-91-8 EC No.: 203-815-1	LC₅₀ : 179 mg/l 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) ErC₅₀ : 58 mg/l 3 d (Algae/water plant, Desmodesmus subspicatus) EC₅₀ : 45 mg/l 2 d (crustaceans, Daphnia magna (Big water flea)) NOEC : 10 mg/l 4 d (Algae/water plant, Desmodesmus subspicatus)
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	LC₅₀ : 0.51 mg/l 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) EC₅₀ : 3.4 mg/l 2 d (crustaceans, Daphnia magna (Big water flea))

Aquatic toxicity:

Toxic to aquatic life with long lasting effects.

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* 12.2. Persistence and degradability

Substance name	Biodegradation	Remark
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	—	Not readily biodegradable (according to OECD criteria)
morpholine CAS No.: 110-91-8 EC No.: 203-815-1	—	Readily biodegradable (according to OECD criteria).

Additional information:

The product has not been tested.

* 12.3. Bioaccumulative potential

Substance name	Log K _{ow}	Bioconcentration factor (BCF)
2-ethylhexyl nitrate CAS No.: 27247-96-7 EC No.: 248-363-6	3.74	
2-ethylhexan-1-ol CAS No.: 104-76-7 EC No.: 203-234-3	2.9	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	8.4	1.65
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine CAS No.: 110-25-8 EC No.: 203-749-3	6.83	
morpholine CAS No.: 110-91-8 EC No.: 203-815-1	-2.55	2.8
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	3.01	

Bioconcentration factor (BCF):

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

* 12.5. Results of PBT and vPvB assessment

Substance name	Results of PBT and vPvB assessment
Kerosine (petroleum), hydrodesulfurized CAS No.: 64742-81-0 EC No.: 265-184-9	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
2-ethylhexyl nitrate CAS No.: 27247-96-7 EC No.: 248-363-6	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Solvent naphtha (petroleum), heavy arom. CAS No.: 64742-94-5 EC No.: 265-198-5	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
2-ethylhexan-1-ol CAS No.: 104-76-7 EC No.: 203-234-3	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	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	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
morpholine CAS No.: 110-91-8 EC No.: 203-815-1	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

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Substance name	Results of PBT and vPvB assessment
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

The product has not been tested.

* **12.6. Endocrine disrupting properties**

No information available.

* **12.7. Other adverse effects**

No information available.

SECTION 13: Disposal considerations

* **13.1. Waste treatment methods**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product:

07 07 04 * other organic solvents, washing liquids and mother liquors

*: Evidence for disposal must be provided.

Waste code packaging:

15 01 10 * packaging containing residues of or contaminated by dangerous substances

*: Evidence for disposal must be provided.

Waste treatment options





Appropriate disposal / Product:

This material and its container must be disposed of as hazardous waste.
Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Handle contaminated packages in the same way as the substance itself.

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			
UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Kerosine (petroleum), hydrodesulfurized)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Kerosine (petroleum), hydrodesulfurized)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Kerosine (petroleum), hydrodesulfurized, KEROSENE)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Kerosine (petroleum), hydrodesulfurized, KEROSENE)
14.3. Transport hazard class(es)			
 9	 9	 9	 9

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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
		 MARINE POLLUTANT	
14.6. Special precautions for user			
Special provisions: 274, 335, 375, 601 Limited quantity (LQ): 5 L Excepted Quantities (EQ): Hazard identification number (Kemler No.): 90 Classification code: M6 tunnel restriction code: (E) Remark:	Special provisions: 274, 335, 375, 601 Limited quantity (LQ): 5 L Excepted Quantities (EQ): Classification code: M6 Remark:	Special provisions: 274, 335, 969 Limited quantity (LQ): 5 L Excepted Quantities (EQ): EmS-No.: F-A; S-F Remark:	Special provisions: A97, A158, A197 Limited quantity (LQ): 30 kg G Excepted Quantities (EQ): Remark:

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

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], Hazard categories:

- E2 Hazardous to the Aquatic Environment in Category Chronic 2 94/69/EG (21. ATP). Benzene < 0,1% (Classification and labeling as carcinogenic is not necessary.) VOC 2004/42/EG: No information available.

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

Observe in addition any national regulations!

15.1.2. National regulations

[DE] National regulations

Restrictions of occupation

To follow: §22 JArbSchG. §5 MuSchRiV. §4 MuSchRiV.

Störfallverordnung

for substances possibly developing during an incident:

Hazard categories:

- E2 Hazardous to the Aquatic Environment in Category Chronic 2

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Water hazard class

WGK:

2 - deutlich wassergefährdend

Remark:

Self-classification (mixture; calculation rule).

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

* 16.1. Indication of changes

1.1.	Product identifier
2.2.	Label elements
3.2.	Mixtures
4.1.	Description of first aid measures
6.4.	Reference to other sections
7.1.	Precautions for safe handling
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.2.	Information on other hazards
12.1.	Toxicity
12.2.	Persistence and degradability
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
12.6.	Endocrine disrupting properties
12.7.	Other adverse effects
13.1.	Waste treatment methods
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes

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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
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]

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aspiration hazard (<i>Asp. Tox. 1</i>)	H304: May be fatal if swallowed and enters airways.	
Skin corrosion/irritation (<i>Skin Irrit. 2</i>)	H315: Causes skin irritation.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
STOT-single exposure (<i>STOT SE 3</i>)	H336: May cause drowsiness or dizziness.	

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Hazard classes and hazard categories	Hazard statements	Classification procedure
Hazardous to the aquatic environment (Aquatic Chronic 2)	H411: Toxic to aquatic life with long lasting effects.	

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

Hazard statements	
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer. (...)
H373	May cause damage to organs through prolonged or repeated exposure. (...)
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.

* Data changed compared with the previous version