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## Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

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

#### 1.1. Product identifier

Trade name/designation:

RAVENOL CVTF NS2/J1 Fluid

Article No.:

1211114

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

Use of the substance/mixture:

Lubricant

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

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

Ravensberger Schmierstoffvertrieb GmbH

Produktsicherheit

Jöllenbecker Str. 2

33824 Werther

Germany

Telephone: +49 5203 9719 0

Telefax: +49 5203 9719 40

E-mail: kontakt@ravenol.de

Website: www.ravenol.de

E-mail (competent person): sdb@ravenol.de

#### \* 1.4. Emergency telephone number

24 hr. emergency phone number, 24h: +49 700 24 112 112 (Contract ID: RAV) / +1 872 5888271  
(Contract ID: RAV)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

#### \* 2.2. Label elements

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

Hazard statements: none

##### Supplemental hazard information

EUH208	Contains 1,2-propanediol, 3-amino, N, N-dicardi alkyl derivs., C14-18 alpha-olefin epoxide, reaction products with boric acid, Reaction products of amines, dicoco alkyl and glycollic acid. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Precautionary statements: none

#### \* 2.3. Other hazards

Other adverse effects:

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



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## 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
EC No.: 471-920-1 REACH No.: 01-0000019770-68	<b>Reaction products of amines, dicoco alkyl and glycollic acid</b> Skin Sens. 1B (H317) <b>Warning</b> <b>Specific concentration limit (SCL)</b> Skin Sens. 1B; H317: 9.4% ≤ C < 100%	0 - < 2 weight-%
EC No.: 939-580-3 REACH No.: 01-2119976364-28	<b>C14-18 alpha-olefin epoxide, reaction products with boric acid</b> Skin Sens. 1B (H317) <b>Warning</b>	0 - < 0.2 weight-%
EC No.: 482-000-4 REACH No.: 01-0000020142-86	<b>1,2-propanediol, 3-amino, N, N-dicardi alkyl derivs.</b> Aquatic Chronic 3 (H412), Skin Sens. 1B (H317) <b>Warning</b>	0 - < 0.2 weight-%
CAS No.: 1218787-32-6 EC No.: 620-540-6 REACH No.: 01-2119510877-33	<b>2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol</b> Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Corr. 1C (H314) <b>Danger</b> M-factor (acute): 10 M-factor (chronic): 1	0 - < 0.2 weight-%
CAS No.: 64742-94-5 EC No.: 265-198-5 REACH No.: 01-2119917229-35	<b>Solvent naphtha (petroleum), heavy arom.</b> Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), STOT SE 3 (H336) <b>Danger</b>	0 - < 0.005 weight-%
CAS No.: 64742-94-5 REACH No.: 01-2119463588-24	<b>Hydrocarbons, C10-C13, Aromatics, &gt;1% Naphthalene</b> Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Carc. 2 (H351), STOT SE 3 (H336) <b>Danger</b>	0 - < 0.002 weight-%
CAS No.: 91-20-3 EC No.: 202-049-5 Index No.: 601-052-00-2	<b>naphthalene</b> Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Carc. 2 (H351) <b>Warning</b>	0 - < 0.0013 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). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

#### Following inhalation:

Provide fresh air. Consult a doctor immediately.

#### In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor immediately.

#### After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Following ingestion:

Rinse mouth thoroughly with water. Do NOT induce vomiting. Consult a doctor immediately.

#### Self-protection of the first aider:

Use personal protection equipment. No direct artificial respiration to be given by first aider.

### \* 4.2. Most important symptoms and effects, both acute and delayed

Contains 1,2-propanediol, 3-amino, N, N-dicardi alkyl derivs., C14-18 alpha-olefin epoxide, reaction products with boric acid, Reaction products of amines, dicoco alkyl and glycollic acid. May produce an allergic reaction.



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**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. Observe risk of aspiration if vomiting occurs.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media:**

Co-ordinate fire-fighting measures to the fire surroundings.

Carbon dioxide (CO<sub>2</sub>)

Extinguishing powder

alcohol resistant foam

Use water spray jet to protect personnel and to cool endangered containers.

**Unsuitable extinguishing media:**

Full water jet

**5.2. Special hazards arising from the substance or mixture**

During heating or in case of fire, toxic gases is possible.

The formation of combustible vapours is possible at temperatures above: Flash point

**Hazardous combustion products:**Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>),

During heating or in case of fire, toxic gases is possible.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Protective clothing.

**5.4. Additional information**

Do not inhale explosion and combustion gases. 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. Special danger of slipping by leaking/spilling product.

**Protective equipment:**

Personal protection equipment: see section 8

**Emergency procedures:**

Eliminate all ignition sources if safe to do so. Remove persons to safety. Provide adequate ventilation.

**6.1.2. For emergency responders****Personal protection equipment:**

Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). 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:**

Suitable material for taking up: Sand, Kieselguhr, Universal binder, Chemical binding agents, containing acids

Prevent spread over a wide area (e.g. by containment or oil barriers).

**For cleaning up:**

Remove from the water surface (e.g. skimming, sucking). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

**Other information:**

Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8



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**6.5. Additional information**

Clear spills immediately. Use appropriate container to avoid environmental contamination.

**SECTION 7: Handling and storage****\* 7.1. Precautions for safe handling****Protective measures****Advices on safe handling:**

Personal protection equipment: see section 8.

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Do not put any product-impregnated cleaning rags into your trouser pockets. Clear spills immediately. Use appropriate container to avoid environmental contamination.

**Fire prevent measures:**

No special fire protection measures are necessary.

**Environmental precautions:**

Shafts and sewers must be protected from entry of the product.

**Advices on general occupational hygiene**

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

**7.2. Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions:**

Keep container tightly closed in a cool, well-ventilated place.

**Requirements for storage rooms and vessels:**

Suitable container/equipment material: Floors should be impervious, resistant to liquids and easy to clean. Shafts and sewers must be protected from entry of the product.

Keep/Store only in original container.

**Hints on storage assembly:**

not required

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

Store in a cool dry place. Keep away from heat.

**7.3. Specific end use(s)****Recommendation:**

Observe technical data sheet.

**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)	Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	① 50 mg/m <sup>3</sup> ② 100 mg/m <sup>3</sup> ⑤ (C9-C14 Aromaten)
VLA (FR)	Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	① 150 mg/m <sup>3</sup> ⑤ (hydrocarbures, benzène C9-C12)
NO	Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	① 25 ppm (120 mg/m <sup>3</sup> ) ⑤ (White Spirit (aromatinnhold > 22 %))
CH	Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	① 100 ppm (525 mg/m <sup>3</sup> ) ⑤ (Testbenzin, Aromatengehalt 10-30%, White Spirit)



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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
MAK (AT)	Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	① 20 mL/m <sup>3</sup> ② 40 mL/m <sup>3</sup> ⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von mehr als 25 %)
MAK (AT)	Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	① 70 mL/m <sup>3</sup> ② 140 mL/m <sup>3</sup> ⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von 1 % bis 25 % und an Hexanen von weniger als 1 %)
WEL (GB)	Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	① 500 mg/m <sup>3</sup> ⑤ (Aromatics)
SI	Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	① 50 mg/m <sup>3</sup>
TRGS 900 (DE)	Hydrocarbons, C10-C13, Aromatics, >1% Naphthalene <b>CAS No.:</b> 64742-94-5	① 50 mg/m <sup>3</sup> ② 100 mg/m <sup>3</sup> ⑤ (C9-C14 Aromaten)
VLA (FR)	Hydrocarbons, C10-C13, Aromatics, >1% Naphthalene <b>CAS No.:</b> 64742-94-5	① 150 mg/m <sup>3</sup> ⑤ (hydrocarbures, benzène C9-C12)
NO	Hydrocarbons, C10-C13, Aromatics, >1% Naphthalene <b>CAS No.:</b> 64742-94-5	① 25 ppm (120 mg/m <sup>3</sup> ) ⑤ (White Spirit (aromatinnhold > 22 %))
CH	Hydrocarbons, C10-C13, Aromatics, >1% Naphthalene <b>CAS No.:</b> 64742-94-5	① 100 ppm (525 mg/m <sup>3</sup> ) ⑤ (Testbenzin, Aromatengehalt 10-30%, White Spirit)
MAK (AT)	Hydrocarbons, C10-C13, Aromatics, >1% Naphthalene <b>CAS No.:</b> 64742-94-5	① 20 mL/m <sup>3</sup> ② 40 mL/m <sup>3</sup> ⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von mehr als 25 %)
MAK (AT)	Hydrocarbons, C10-C13, Aromatics, >1% Naphthalene <b>CAS No.:</b> 64742-94-5	① 70 mL/m <sup>3</sup> ② 140 mL/m <sup>3</sup> ⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von 1 % bis 25 % und an Hexanen von weniger als 1 %)
WEL (GB)	Hydrocarbons, C10-C13, Aromatics, >1% Naphthalene <b>CAS No.:</b> 64742-94-5	① 500 mg/m <sup>3</sup> ⑤ (Aromatics)
SI	Hydrocarbons, C10-C13, Aromatics, >1% Naphthalene <b>CAS No.:</b> 64742-94-5	① 50 mg/m <sup>3</sup>
CH	naphthalene <b>CAS No.:</b> 91-20-3 <b>EC No.:</b> 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> ) ⑤ (kann über die Haut aufgenommen werden)
BE	naphthalene <b>CAS No.:</b> 91-20-3 <b>EC No.:</b> 202-049-5	① 10 ppm (53 mg/m <sup>3</sup> ) ② 15 ppm (80 mg/m <sup>3</sup> ) ⑤ (peut être absorbé par la peau)
CZ	naphthalene <b>CAS No.:</b> 91-20-3 <b>EC No.:</b> 202-049-5	① 9.4 ppm (50 mg/m <sup>3</sup> ) ② 18.8 ppm (100 mg/m <sup>3</sup> )



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PL	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 20 mg/m <sup>3</sup> ② 50 mg/m <sup>3</sup> ⑤ (może przenikać przez skórę do organizmu)
NO	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
IE	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
HTP (FI)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 1 ppm (5 mg/m <sup>3</sup> ) ② 2 ppm (10 mg/m <sup>3</sup> )
LT	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> ) ⑤ (Kancerogeninės)
SE	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> ) ③ 15 ppm (80 mg/m <sup>3</sup> )
NPEL (SK)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> ) ② 15 ppm (80 mg/m <sup>3</sup> )
TRGS 900 (DE)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 0.4 ppm (2 mg/m <sup>3</sup> ) ② 1.6 ppm (8 mg/m <sup>3</sup> ) ⑤ (Aerosol und Dampf, kann über die Haut aufgenommen werden)
DK	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> ) ② 20 ppm (100 mg/m <sup>3</sup> )
BG	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m <sup>3</sup> ② 75 mg/m <sup>3</sup>
HR	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
ES	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (53 mg/m <sup>3</sup> ) ② 15 ppm (80 mg/m <sup>3</sup> ) ⑤ (puede ser absorbido a través dérmica)
RO	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
EE	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
LV	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
Alberta (CA)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m <sup>3</sup> ) ② 15 ppm (79 mg/m <sup>3</sup> )
BC (CA)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm ⑤ (may be absorbed through the skin)
MY	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m <sup>3</sup> )
IOELV (EU)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )



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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
VLA (FR)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
SI	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m <sup>3</sup> ② 50 mg/m <sup>3</sup> ⑤ (frakcija ki jo je mogoče vdihniti računati je treba z možnostjo prodiranja skozi kožo)
TW	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m <sup>3</sup> )
KR	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> ) ② 15 ppm (75 mg/m <sup>3</sup> )
IS	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
CN	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m <sup>3</sup> ② 75 mg/m <sup>3</sup> ⑤ (#####)
RU	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	③ 20 mg/m <sup>3</sup>
HU	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m <sup>3</sup>
GR	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
NL	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m <sup>3</sup> ② 80 mg/m <sup>3</sup>
MAK (AT)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> ) ⑤ (kann über die Haut aufgenommen werden)
SI	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm ② 10 ppm ⑤ (računati je treba z možnostjo prodiranja skozi kožo)
TR	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
Québec (CA)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m <sup>3</sup> ) ② 15 ppm (79 mg/m <sup>3</sup> )
OSHA (US)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> )
NIOSH (US)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m <sup>3</sup> ) ② 15 ppm (75 mg/m <sup>3</sup> )
ACGIH (US)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m <sup>3</sup> ) ② 15 ppm (79 mg/m <sup>3</sup> ) ⑤ (may be absorbed through the skin)

**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
Reaction products of amines, dicoco alkyl and glycollic acid <b>EC No.:</b> 471-920-1	0.417 mg/cm <sup>2</sup>	① DNEL worker ② Acute - dermal, local effects
C14-18 alpha-olefin epoxide, reaction products with boric acid <b>EC No.:</b> 939-580-3	5.88 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
C14-18 alpha-olefin epoxide, reaction products with boric acid <b>EC No.:</b> 939-580-3	16.7 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol <b>CAS No.:</b> 1218787-32-6 <b>EC No.:</b> 620-540-6	2.112 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol <b>CAS No.:</b> 1218787-32-6 <b>EC No.:</b> 620-540-6	0.3 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	192 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	151 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	32 mg/m <sup>3</sup>	① DNEL Consumer ② Long-term - inhalation, systemic effects
Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	12.5 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	7.5 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Solvent naphtha (petroleum), heavy arom. <b>CAS No.:</b> 64742-94-5 <b>EC No.:</b> 265-198-5	7.5 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
naphthalene <b>CAS No.:</b> 91-20-3 <b>EC No.:</b> 202-049-5	25 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
naphthalene <b>CAS No.:</b> 91-20-3 <b>EC No.:</b> 202-049-5	25 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, local effects
naphthalene <b>CAS No.:</b> 91-20-3 <b>EC No.:</b> 202-049-5	3.57 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
Reaction products of amines, dicoco alkyl and glycollic acid <b>EC No.:</b> 471-920-1	400 µg/L	① PNEC aquatic, freshwater
Reaction products of amines, dicoco alkyl and glycollic acid <b>EC No.:</b> 471-920-1	40 µg/L	① PNEC aquatic, marine water
Reaction products of amines, dicoco alkyl and glycollic acid <b>EC No.:</b> 471-920-1	100 mg/L	① PNEC sewage treatment plant
C14-18 alpha-olefin epoxide, reaction products with boric acid <b>EC No.:</b> 939-580-3	0.2 mg/L	① PNEC aquatic, freshwater
C14-18 alpha-olefin epoxide, reaction products with boric acid <b>EC No.:</b> 939-580-3	0.02 mg/L	① PNEC aquatic, marine water





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C14-18 alpha-olefin epoxide, reaction products with boric acid EC No.: 939-580-3	100 mg/L	① PNEC sewage treatment plant
C14-18 alpha-olefin epoxide, reaction products with boric acid EC No.: 939-580-3	8,556 mg/kg	① PNEC sediment, freshwater
C14-18 alpha-olefin epoxide, reaction products with boric acid EC No.: 939-580-3	855.6 mg/kg	① PNEC sediment, marine water
2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol CAS No.: 1218787-32-6 EC No.: 620-540-6	0.214 µg/L	① PNEC aquatic, freshwater
2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol CAS No.: 1218787-32-6 EC No.: 620-540-6	0.0214 µg/L	① PNEC aquatic, marine water
2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol CAS No.: 1218787-32-6 EC No.: 620-540-6	1.5 mg/L	① PNEC sewage treatment plant
2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol CAS No.: 1218787-32-6 EC No.: 620-540-6	0.87 µg/L	① PNEC aquatic, intermittent release
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	2.4 µg/L	① PNEC aquatic, freshwater
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	2.4 µg/L	① PNEC aquatic, marine water
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	2.9 mg/L	① PNEC sewage treatment plant
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	20 µg/L	① PNEC aquatic, intermittent release

## \* 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

See section 7. No additional measures necessary.

### 8.2.2. Personal protection equipment



#### Eye/face protection:

During transfer: Eye glasses with side protection  
Wear eye/face protection. EN 166

#### Skin protection:

Hand protection

Suitable material: NBR (Nitrile rubber), PVC (polyvinyl chloride), CR (polychloroprene, chloroprene rubber)

Thickness of the glove material:  $\geq 0,4$  mm

Breakthrough time: 480 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.

Tested protective gloves must be worn: EN ISO 374

Suitable protective clothing: Protective clothing

#### Respiratory protection:

Usually no personal respiratory protection necessary.



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**8.2.3. Environmental exposure controls**

See section 7. No additional measures necessary.

**SECTION 9: Physical and chemical properties****\* 9.1. Information on basic physical and chemical properties****Appearance****Physical state:** Liquid**Colour:** green**Odour:** characteristic**Safety relevant basis data**

Parameter	Value	at °C	① Method ② Remark
pH	<i>not applicable</i>		
Melting point	<i>not determined</i>		
Freezing point	<i>not determined</i>		
Initial boiling point and boiling range	<i>not determined</i>		
Decomposition temperature	<i>not determined</i>		
Flash point	218 °C		
Evaporation rate	<i>not determined</i>		
Auto-ignition temperature	<i>not determined</i>		
Upper/lower flammability or explosive limits	<i>not determined</i>		
Vapour pressure	<i>not determined</i>		
Vapour density	<i>not determined</i>		
Density	846 kg/m <sup>3</sup>	15 °C	
Relative density	<i>not determined</i>		
Bulk density	<i>not determined</i>		
Water solubility	practically insoluble		
Partition coefficient: n-octanol/water	<i>not determined</i>		
Dynamic viscosity	<i>not determined</i>		
Kinematic viscosity	35.5 mm <sup>2</sup> /s	40 °C	

**\* 9.2. Other information**

Not applicable

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No known hazardous reactions. Risk of explosion if heated under confinement.

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions.

**10.4. Conditions to avoid**

To avoid thermal decomposition do not overheat.

**10.5. Incompatible materials**

Materials to avoid: Acid, Oxidising agent, Reducing agent

**\* 10.6. Hazardous decomposition products**Hazardous combustion products: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), During heating or in case of fire, toxic gases is possible.**SECTION 11: Toxicological information****\* 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Reaction products of amines, dicoco alkyl and glycollic acid EC No.: 471-920-1****LD<sub>50</sub> oral:** 2,500 mg/kg (Rat)**LD<sub>50</sub> dermal:** 2,000 mg/kg (Rat)



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<b>C14-18 alpha-olefin epoxide, reaction products with boric acid</b>	<b>EC No.:</b> 939-580-3
<b>LD<sub>50</sub> oral:</b> >16,000 mg/kg (Rat)	
<b>LD<sub>50</sub> dermal:</b> >2,000 mg/kg (Rat)	
<b>1,2-propanediol, 3-amino, N, N-dicardi alkyl derivs.</b>	<b>EC No.:</b> 482-000-4
<b>LD<sub>50</sub> oral:</b> >2,500 mg/kg	
<b>LD<sub>50</sub> dermal:</b> >2,000 mg/kg	
<b>2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol</b>	<b>CAS No.:</b> 1218787-32-6
<b>EC No.:</b> 620-540-6	
<b>LD<sub>50</sub> oral:</b> ≥1,200 - ≤2,000 mg/kg (Rat)	
<b>naphthalene</b>	<b>CAS No.:</b> 91-20-3 <b>EC No.:</b> 202-049-5
<b>LD<sub>50</sub> oral:</b> >533 mg/kg (Mouse)	
<b>LD<sub>50</sub> dermal:</b> >16,000 mg/kg (Rat)	
<b>LC<sub>50</sub> Acute inhalation toxicity (dust/mist):</b> >0.4 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:**

Contains 1,2-propanediol, 3-amino, N, N-dicardi alkyl derivs., C14-18 alpha-olefin epoxide, reaction products with boric acid, Reaction products of amines, dicoco alkyl and glycollic acid. May produce an allergic reaction.

**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:**

Observe risk of aspiration if vomiting occurs.

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:**

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

**SECTION 12: Ecological information**\* **12.1. Toxicity**

<b>Reaction products of amines, dicoco alkyl and glycollic acid</b>	<b>EC No.:</b> 471-920-1
<b>LC<sub>50</sub>:</b> 77 mg/L 2 d (crustaceans)	
<b>NOEC:</b> 56 mg/L 21 d (crustaceans)	
<b>EC<sub>50</sub>:</b> 160 mg/L 3 d (Algae/water plant)	
<b>NOEC:</b> 20 mg/L 3 d (Algae/water plant)	



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<b>C14-18 alpha-olefin epoxide, reaction products with boric acid</b> EC No.: 939-580-3
LC <sub>50</sub> : >100 mg/L 4 d (fish)
LC <sub>50</sub> : >100 mg/L 3 d (Algae/water plant)
EC <sub>50</sub> : >100 mg/L 2 d (crustaceans)
<b>1,2-propanediol, 3-amino, N, N-dicardi alkyl derivs.</b> EC No.: 482-000-4
LC <sub>50</sub> : >100 mg/L 4 d (fish)
NOEC: 100 mg/L 4 d (fish)
EC <sub>50</sub> : 230 mg/L 2 d (crustaceans)
NOEC: 32 mg/L 2 d (crustaceans)
EC <sub>50</sub> : 10 mg/L 3 d (Algae/water plant)
NOEC: 3.2 mg/L 3 d (Algae/water plant)
<b>2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol</b> CAS No.: 1218787-32-6 EC No.: 620-540-6
LC <sub>50</sub> : ≥0.1 mg/L 4 d (fish)
EC <sub>50</sub> : 0.043 mg/L 2 d (crustaceans)
EC <sub>50</sub> : 0.0867 mg/L 3 d (Algae/water plant)
<b>naphthalene</b> CAS No.: 91-20-3 EC No.: 202-049-5
LC <sub>50</sub> : >1.2 - <2.1 mg/L 4 d (fish)
EC <sub>50</sub> : >2.16 mg/L 2 d (crustaceans)
EC <sub>50</sub> : >2.96 mg/L 4 d (Algae/water plant)

**Assessment/classification:**

The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

**Additional ecotoxicological information:**

Do not allow uncontrolled discharge of product into the environment.

**12.2. Persistence and degradability****Biodegradation:**

Not readily biodegradable (according to OECD criteria)

\* **12.3. Bioaccumulative potential**

<b>Reaction products of amines, dicoco alkyl and glycollic acid</b> EC No.: 471-920-1
Bioconcentration factor (BCF): 222
<b>naphthalene</b> CAS No.: 91-20-3 EC No.: 202-049-5
Log K <sub>OW</sub> : 3.7
Bioconcentration factor (BCF): 168

**Accumulation / Evaluation:**

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**

<b>Reaction products of amines, dicoco alkyl and glycollic acid</b> EC No.: 471-920-1
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>C14-18 alpha-olefin epoxide, reaction products with boric acid</b> EC No.: 939-580-3
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>1,2-propanediol, 3-amino, N, N-dicardi alkyl derivs.</b> EC No.: 482-000-4
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>2,2'-(C16-18 (Even numbered, C18 unsaturated) alkyl imino) diethanol</b> CAS No.: 1218787-32-6 EC No.: 620-540-6
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>naphthalene</b> CAS No.: 91-20-3 EC No.: 202-049-5
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>naphthalene</b> CAS No.: 91-20-3 EC No.: 202-049-5
<b>Results of PBT and vPvB assessment:</b> 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.



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\* **12.6. Endocrine disrupting properties**

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

**12.7. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Dispose of waste according to applicable legislation.

**Waste treatment options****Appropriate disposal / Product:**

Dispose of waste according to applicable legislation.

**Appropriate disposal / Package:**

Non-contaminated packages may be recycled.

**Other disposal recommendations:**

Consult the appropriate local waste disposal expert about waste disposal.

**13.2. Additional information**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

**SECTION 14: Transport information**

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1. UN number or ID number</b>			
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.
<b>14.2. UN proper shipping name</b>			
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.
<b>14.3. Transport hazard class(es)</b>			
not relevant	not relevant	not relevant	not relevant
<b>14.4. Packing group</b>			
not relevant	not relevant	not relevant	not relevant
<b>14.5. Environmental hazards</b>			
not relevant	not relevant	not relevant	not relevant
<b>14.6. Special precautions for user</b>			
not relevant	not relevant	not relevant	not relevant

**14.7. Maritime transport in bulk according to IMO instruments**

Not applicable

**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:

- E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1
- Safety data sheet available on request.

**15.1.2. National regulations** **[DE] National regulations****Störfallverordnung****for substances contained in the product:**

Hazard categories:



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- E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

**Technische Anleitung Luft (TA-Luft)****Remark:**

To follow: 5.2.5

**Water hazard class****WGK:**

2 - deutlich wassergefährdend

**Source:**

Self-classification (mixture; calculation rule).

Identification number 436

**Technische Regeln für Gefahrstoffe**

TRGS 510

TRGS 500


**Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)**

Berufsgenossenschaftliche Informationen (DGUV-Informationen) 868

Berufsgenossenschaftliche Regeln (DGUV-Regeln) 189, 190, 192, 195

**Other regulations, restrictions and prohibition regulations**

Altöl-Verordnung (AltölV)

 **[DK] National regulations****Other regulations, restrictions and prohibition regulations**

Dänemark: Bekendtgørelse af lov om arbejdsmiljø: Beskæftigelsesministeriets lovbekendtgørelse nr. 1072 af 7. september 2010

Lister over stoffer og processer, der anses for at være kræftfremkaldende

 **[FR] National regulations****Other regulations, restrictions and prohibition regulations**

Frankreich: Tableaux de maladies professionnelles

Nomenclature des installations classées pour la protection de l'environnement

Articles L. 4523-1 à L. 4523-17, L. 4611-1 à L. 4614-16, R. 4523-1 à R. 4523-17 et R. 4612-1 à R. 4615-21 du Code du travail

 **[NL] National regulations****Other regulations, restrictions and prohibition regulations**

Niederlande: Lijst vankankerverwekkende, mutagene en voor de voortplanting giftige stoffen (SZW)

Algemeene beoordelingsmethodiek Water (ABM)

Nederlandse emissierichtlijn (NeR)

NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Borstvoeding

NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Vruchtbaarheid

NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Ontwikkeling

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

Wet van 18 maart 1999, houdende bepalingen ter verbetering van de arbeidsomstandigheden (Arbeidsomstandighedenwet)

Wet op de ondernemingsraden 1971

 **[CH] National regulations****Other regulations, restrictions and prohibition regulations**

Mengenschwelle (Schweiz - StFV)

Gefahrencode

Brandverhütung, BVD (Schweiz)

**15.2. Chemical Safety Assessment**

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

**15.3. Additional information**

No data available.

**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
2.2.	Label elements
2.3.	Other hazards
3.2.	Mixtures



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4.2.	Most important symptoms and effects, both acute and delayed
6.1.	Personal precautions, protective equipment and emergency procedures
7.1.	Precautions for safe handling
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
9.2.	Other information
10.6.	Hazardous decomposition products
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.2.	Information on other hazards
12.1.	Toxicity
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
12.6.	Endocrine disrupting properties
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.5.	Relevant R-, H- and EUH-phrases (Number and full text)

### 16.2. Abbreviations and acronyms

See overview table at [www.euphrac.eu](http://www.euphrac.eu)

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

### 16.3. Key literature references and sources for data

67/548/EEC - Dangerous Substances Directive

1999/45/EEC - Dangerous Preparations Directive

EC 1907/2006 - REACH Regulation

1272/2008 EC - Regulation on classification, labeling and packaging of substances and mixtures, and amending Directives 67/548/EEC and 1999/45/EC and Regulation (EC) No 1907/2006

Regulation (EC) No 1907/2006 (REACH), Annex II

European Chemicals Agency (ECHA), C & L classification and labeling inventory

European Chemicals Agency (ECHA), ECHA CHEM Registered substances

OECD The Global Portal to Information on Chemical Substances (ChemPortal)

Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA): GESTIS substance database and International limit values for chemical substances

Federal Environment Agency, Section IV 2.4: Documentation and Information Centre substances hazardous to water Rigoletto (catalog substances hazardous to water)

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

### \* 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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
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.
H412	Harmful 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



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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