



# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 02.03.2022

Version number 83 (replaces version 82)

Revision: 02.03.2022

Trade name: OPN-Rust Remover Clear

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

EC number: 918-481-9 Reg.nr.: 01-2119457273-39-xxxx	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics ⚠ Asp. Tox. 1, H304	25-<50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-<20%
CAS: 64742-53-6 EINECS: 265-156-6 Reg.nr.: 01-2119480375-34-xxxx	Distillates (petroleum), hydrotreated light naphthenic ⚠ Asp. Tox. 1, H304	10-<20%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane, pure ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-<20%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	5-<10%
CAS: 111-76-2 EINECS: 203-905-0 Reg.nr.: 01-2119475108-36-xxxx	2-butoxyethanol ⚠ Acute Tox. 3, H311; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE: LD50 oral: 1,200 mg/kg	1-<2.5%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**  
Supply fresh air; consult doctor in case of complaints.  
Take affected persons into fresh air and keep quiet.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Immediately remove any clothing soiled by the product.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
Fire-extinguishing powder

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Carbon dioxide

Use fire extinguishing methods suitable to surrounding conditions.

Foam

- **5.2 Special hazards arising from the substance or mixture** Can form explosive gas-air mixtures.
  - **5.3 Advice for firefighters**
  - **Protective equipment:** Wear self-contained respiratory protective device.
  - **Additional information**
- Cool endangered receptacles with water spray.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Particular danger of slipping on leaked/spilled product.  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Keep away from ignition sources.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Avoid contact with skin and eyes.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.2 Exposure controls**

· **Ingredients with limit values that require monitoring at the workplace:**

**CAS: 106-97-8 butane, pure**

WEL	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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**CAS: 111-76-2 2-butoxyethanol**

WEL	Short-term value: 246 mg/m <sup>3</sup> , 50 ppm Long-term value: 123 mg/m <sup>3</sup> , 25 ppm Sk, BMGV
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**· Ingredients with biological limit values:**
**CAS: 111-76-2 2-butoxyethanol**

BMGV	240 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: butoxyacetic acid
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- **Additional information:** The lists valid during the making were used as basis.
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Recommended filter device for short term use:** Filter AX
- **Hand protection**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves (EN 374)**
- **Penetration time of glove material**  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection (EN 166)**
- **Body protection:**  
(EN 13034-6)  
Protective work clothing

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Aerosol
- **Colour:** Colourless
- **Odour:** Petroleum-like
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Undetermined.
- **Boiling point or initial boiling point and boiling range** <0 °C
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** Not applicable, as aerosol.
- **Ignition temperature:** >200 °C
- **Decomposition temperature:** Not determined.
- **pH** Not determined.
- **Viscosity:**
- **Kinematic viscosity** Not determined.
- **Dynamic:** Not determined.

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· <b>Solubility</b>	
· <b>water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	0.69181 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.

· <b>9.2 Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Aerosol
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Auto-ignition temperature:</b>	Not determined.
· <b>Explosive properties:</b>	Not determined.
· <b>Solvent separation test:</b>	
· <b>Organic solvents:</b>	85.6 %
· <b>VOC (EC)</b>	591.9 g/l
· <b>Solids content:</b>	0.0 %
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not applicable.

· <b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Extremely flammable aerosol. Pressurised container: May burst if heated.
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void
· <b>Desensitised explosives</b>	Void

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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### SECTION 11: Toxicological information

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

· **Acute toxicity**

· **LD/LC50 values relevant for classification:**

**ATE (Acute Toxicity Estimates)**

Oral	LD50	77,321 mg/kg (rat)
Dermal	LD50	20,898 mg/kg
Inhalative	LC50/4 h	575 mg/l

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>4,951 mg/l (rat)

**CAS: 74-98-6 propane**

Inhalative	LC50/4 h	>20 mg/l (rat)
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**CAS: 106-97-8 butane, pure**

Inhalative	LC50/4 h	658 mg/l (rat)
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**CAS: 75-28-5 isobutane**

Inhalative	LC50/4 h	658 mg/l (rat)
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**CAS: 111-76-2 2-butoxyethanol**

Oral	LD50	1,200 mg/kg (ATE)
		1,480 mg/kg (rat)
Dermal	LD50	400 mg/kg (rab)
Inhalative	LC50/4 h	2.2 mg/l (rat)

· **Aspiration hazard** May be fatal if swallowed and enters airways.

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

### SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

<ul style="list-style-type: none"> <li>· <b>14.1 UN number or ID number</b></li> <li>· <b>ADR/RID/ADN, IMDG, IATA</b></li> </ul>	UN1950
<ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR/RID/ADN</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul>	UN1950 AEROSOLS AEROSOLS AEROSOLS, flammable
<ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR/RID/ADN</b></li> </ul> <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	2 5F Gases. 2.1
<ul style="list-style-type: none"> <li>· <b>IMDG, IATA</b></li> </ul> <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	2.1 Gases. 2.1
<ul style="list-style-type: none"> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR/RID/ADN, IMDG, IATA</b></li> </ul>	Void
<ul style="list-style-type: none"> <li>· <b>14.5 Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>	No
<ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> <li>· <b>Hazard identification number (Kemler code):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Stowage Code</b></li>   <li>· <b>Segregation Code</b></li> </ul>	Warning: Gases. - F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS:

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	Segregation as for the appropriate subdivision of class 2.
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>Transport/Additional information:</b>	
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· <b>ADR/RID/ADN</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	D
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· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity
· <b>UN "Model Regulation":</b>	UN 1950 AEROSOLS, 2.1

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category P3a** FLAMMABLE AEROSOLS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H220 Extremely flammable gas.  
 H280 Contains gas under pressure; may explode if heated.  
 H302 Harmful if swallowed.  
 H304 May be fatal if swallowed and enters airways.  
 H311 Toxic in contact with skin.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 ICAO: International Civil Aviation Organisation  
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)

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VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1A: Flammable gases – Category 1A

Aerosol 1: Aerosols – Category 1

Press. Gas (Comp.): Gases under pressure – Compressed gas

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

· **\* Data compared to the previous version altered.**

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