

# Safety data sheet

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

Printing date 16.10.2014

Version number 1403

Revision: 16.10.2014

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

#### 1.1 Product identifier

- . Trade name: **ReflexEX medium**
- . Article number: RM 500.01
- . **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- . Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- . Product category PC9a Coatings and paints, thinners, paint removers
- . Application of the substance / the mixture Mineral coating

#### 1.3 Details of the supplier of the safety data sheet

- . Manufacturer/Supplier: Opcotec GmbH  
Louisenstr. 69  
D-61348 Bad Homburg  
Telefon: +49-(0)69-95504526, Mobil: +49-(0)171-1885927  
E-mail:  
acsogaro@opcotec.eu  
cc: tmlutin@opcotec.eu  
www.opcotec.eu
- . Further information obtainable from: Environment protection department  
Advice centre for poisoning university Mainz phone +49(0)6131/19240  
or poison information: +49(0)700/GIFTINFO
- . **1.4 Emergency telephone number:**

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

- . Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

- . Classification according to Directive 67/548/EEC or Directive 1999/45/EC



F+; Extremely flammable

R12: Extremely flammable.

- . Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
Warning! Pressurised container.

- . Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

#### 2.2 Label elements

- . Labelling according to Regulation (EC) No 1272/2008
- . Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS02

- . Signal word

Danger

- . Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

- . Precautionary statements

P102 Keep out of reach of children.  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Pressurized container: Do not pierce or burn, even after use.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

- . Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.  
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.  
Buildup of explosive mixtures possible without sufficient ventilation.

#### 2.3 Other hazards

- . Results of PBT and vPvB assessment
- . PBT:
- . vPvB:

Not applicable.  
Not applicable.

### SECTION 3: Composition/information on ingredients

#### 3.2 Chemical characterisation: Mixtures

- . Description: Active substance with propellant

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. Dangerous components:		
CAS: 106-97-8 EINECS: 203-448-7	butane (containing $\leq 0,1$ % butadiene (106-99-0)) F+ R12 Flam. Gas 1, H220; Press. Gas, H280	25-50%
CAS: 74-98-6 EINECS: 200-827-9	propane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-25%
CAS: 64-17-5 EINECS: 200-578-6	ethanol F R11 Flam. Liq. 2, H225	10-25%
CAS: 75-28-5 EINECS: 200-857-2	isobutane (containing $\leq 0,1$ % butadiene (106-99-0)) F+ R12 Flam. Gas 1, H220; Press. Gas, H280	2.5-10%

. Additional information: For the wording of the listed risk 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.
- . After skin contact: Wash with water and soap and rinse thoroughly
- . After eye contact: Rinse opened eye for several minutes under running water.
- . After swallowing: Seek immediate medical advice.

#### . 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: CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- . For safety reasons unsuitable extinguishing agents: CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

- . Water with full jet

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

No further relevant information available.

#### . 5.3 Advice for firefighters

- . Protective equipment: No special measures required.

### SECTION 6: Accidental release measures

#### . 6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.

#### . 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

#### . 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

#### . 6.4 Reference to other sections

Do not flush with water or aqueous cleansing agents  
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

Keep away from heat and direct sunlight.  
Ensure that suitable extractors are available on processing machines

- . Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
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.  
Do not spray onto a naked flame or any incandescent material.

#### . 7.2 Conditions for safe storage, including any incompatibilities

- . Storage:

- . Requirements to be met by storerooms and receptacles:

Store in a cool location.  
Observe official regulations on storing packagings with pressurised containers.

- . Information about storage in one common storage facility:

Store away from oxidising agents.

- . Further information about storage conditions:

Keep container tightly sealed.

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Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.  
No further relevant information available.

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**7.3 Specific end use(s)****SECTION 8: Exposure controls/personal protection**

. Additional information about design of technical facilities:

No further data; see item 7.

**8.1 Control parameters**

. Ingredients with limit values that require monitoring at the workplace:

**106-97-8 butane (containing  $\leq 0,1$  % butadiene (106-99-0))**

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)

**64-17-5 ethanol**

WEL	Long-term value: 1920 mg/m <sup>3</sup> , 1000 ppm
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. Additional information:

The lists valid during the making were used as basis.

**8.2 Exposure controls**

. Personal protective equipment:  
. General protective and hygienic measures:  
. Respiratory protection:  
. Protection of hands:

Wash hands before breaks and at the end of work.  
Use suitable respiratory protective device in case of insufficient ventilation.  
Protective gloves  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.  
Tightly sealed goggles

. Material of gloves

. Penetration time of glove material

. Eye protection:

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

. General Information

. Appearance:

Form:	Dispersion
Colour:	White
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.

. Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	-44 °C

. Flash point:

-60 °C

. Flammability (solid, gaseous):

Not applicable.

. Ignition temperature:

365 °C

. Decomposition temperature:

Not determined.

. Self-igniting:

Product is not selfigniting.

. Danger of explosion:

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

. Explosion limits:

Lower:	1.5 Vol %
Upper:	15.0 Vol %

. Vapour pressure at 20 °C:

8300 hPa

. Density at 20 °C:

0.8485 g/cm<sup>3</sup>

. Relative density

Not determined.

. Vapour density

Not determined.

. Evaporation rate

Not applicable.

. Solubility in / Miscibility with water:

Not miscible or difficult to mix.

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- . Partition coefficient (n-octanol/water): Not determined.
- . Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- . Solvent content:
  - Organic solvents: 83.2 %
- . **9.2 Other information** No further relevant information available.

**SECTION 10: Stability and reactivity**

- . **10.1 Reactivity**
- . **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:** Hazardous thermal decomposition products may include: Formaldehyde, Carbon dioxide, Carbon monoxide, Methanol

**SECTION 11: Toxicological information**

- . **11.1 Information on toxicological effects**
- . Acute toxicity:
- . Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Irritating effect.
- . Sensitisation: No sensitising effects known.

**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.
- . 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.
- . **12.5 Results of PBT and vPvB assessment**
- . PBT: Not applicable.
- . vPvB: Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

**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.
- . European waste catalogue: For empty packaging  
EU-waste catalogue: 15 01 04  
Metallic packaging
- . Uncleaned packaging:
- . Recommendation: Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- . **14.1 UN-Number**
- . ADR, IMDG, IATA: UN1950
- . **14.2 UN proper shipping name**
- . ADR: 1950 AEROSOLS
- . IMDG: AEROSOLS
- . IATA: AEROSOLS, flammable

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**14.3 Transport hazard class(es)**

. ADR



. Class 2 5F Gases.  
 . Label 2.1

. IMDG, IATA



. Class 2.1  
 . Label 2.1

**14.4 Packing group**

. ADR, IMDG, IATA Void

**14.5 Environmental hazards:**

. Marine pollutant: No

. **14.6 Special precautions for user** Warning: Gases.

. Danger code (Kemler): -

. EMS Number: F-D,S-U

. **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

. Transport/Additional information:

. ADR

. Limited quantities (LQ) 1L  
 . Excepted quantities (EQ) Code: E0  
 Not permitted as Excepted Quantity

. Transport category 2

. Tunnel restriction code D

. IMDG

. Limited quantities (LQ) 1L  
 . Excepted quantities (EQ) Code: E0  
 Not permitted as Excepted Quantity

. UN "Model Regulation": UN1950, AEROSOLS, 2.1

### SECTION 15: Regulatory information

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

. National regulations:

Class	Share in %
1.1	50/100

. Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

. **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.

. Department issuing MSDS: Environment protection department.

. Abbreviations and acronyms: ADR: Accord européen sur le transport 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)  
 Flam. Gas 1: Flammable gases, Hazard Category 1  
 Flam. Aerosol 1: Flammable aerosols, Hazard Category 1  
 Press. Gas: Gases under pressure: Compressed gas  
 Flam. Liq. 2: Flammable liquids, Hazard Category 2

. \* Data compared to the previous version altered.