

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 02.01.2017

Version number 1

Revision: 02.01.2017

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

- **1.1 Product identifier**
- **Trade name:** REFLECTO
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU21 Consumer uses: Private households / general public / consumers
- **Application of the substance / the mixture** Self glazing emulsion
- **Uses advised against**
The mixture is not recommended for industrial, professional and consumer applications not specified as relevant identified uses
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MA-FRA S.p.A.
Via Aquileia, 44/46
20021 Baranzate (MI) ITALIA
mafra@mafra.it
- **Informing department:**
info@mafra.it
E-mail: lab@mafra.it
- **1.4 Emergency telephone number:** Contact the local hospital or the poison control center closest to you

Tel. +39 023569981

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008** The product is not classified according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**
Contains Amberon. May produce an allergic reaction.
Keep out of the reach of children
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances

- Dangerous components:

CAS: 111-76-2	2-butoxyethanol	<2%
EINECS: 203-905-0	⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	
Reg.nr.: 01-2119475108-36		

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CAS: 107-98-2 EINECS: 203-539-1 Reg.nr.: 01-2119457435-35-0001	I-methoxypropan-2-ol Flam. Liq. 3, H226; STOT SE 3, H336	<2%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	<2%

- Regulation (EC) No 648/2004

perfumes (Amberonne, Alpha Hexyl Cinnamaldehyde), preservation agents (BENZISOTHIAZOLINONE, METHYLISOTHIAZOLINONE)

- **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**
- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** The product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** In case of persistent symptoms consult doctor.
- **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**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
Can be released in case of fire
Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information**
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** Not required.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, 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).
- **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 information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** Protect from heat.

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- 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and containers: Store only in the original container.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Storage class
- Class according to regulation on inflammable liquids: Void
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

- 8.1 Control parameters

- Components with limit values that require monitoring at the workplace:

111-76-2 2-butoxyethanol

WEL Short-term value: 246 mg/m³, 50 ppm
 Long-term value: 123 mg/m³, 25 ppm
 Sk, BMGV

107-98-2 1-methoxypropan-2-ol

WEL Short-term value: 560 mg/m³, 150 ppm
 Long-term value: 375 mg/m³, 100 ppm
 Sk

67-63-0 propan-2-ol

WEL Short-term value: 1250 mg/m³, 500 ppm
 Long-term value: 999 mg/m³, 400 ppm

- PNECs

111-76-2 2-butoxyethanol

PNEC STP	463 mg/L (STP)
Soft Water	8.8 mg/L (Water)
Sea water	0.88 mg/L (Water)
Sediment (soft water)	34.6 mg/Kg (Water)
Sediment (sea water)	3.46 mg/Kg (Water)

- Ingredients with biological limit values:

111-76-2 2-butoxyethanol

BMGV 240 mmol/mol creatinine
 Medium: urine
 Sampling time: post shift
 Parameter: butoxyacetic acid

- Additional information: The lists that were valid during the compilation were used as basis.

- 8.2 Exposure controls

- Personal protective equipment

- General protective and hygienic measures

The usual precautionary measures should be adhered to general rules for handling chemicals.

- Breathing equipment: Not required.

- Protection of hands:



Not required.

- Material of gloves

Not required.

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Nitrile rubber, NBR

Neoprene gloves

- Eye protection:

Safety glasses recommended during refilling.

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

Form: Liquid**Colour:** White**- Odour:** Pleasant**- Odour threshold:** Not determined.**- pH-value at 20 °C:** 7

- Change in condition

Melting point/Melting range: Not determined**Boiling point/Boiling range:** 100 °C**- Flash point:** Not applicable**- Inflammability (solid, gaseous)** Not applicable.

- Ignition temperature:

Decomposition temperature: Not determined.**- Self-inflammability:** Product is not selfigniting.**- Danger of explosion:** Product is not explosive.

- Critical values for explosion:

Lower: Not determined.**Upper:** Not determined.**- Vapour pressure at 20 °C:** 23 hPa**- Density at 20 °C** 1 g/cm³**- Relative density** Not determined.**- Vapour density** Not determined.**- Evaporation rate** Not determined.

- Solubility in / Miscibility with

Water: Not miscible or difficult to mix**- Partition coefficient (n-octanol/water):** Not determined.

- Viscosity:

dynamic: Not determined.**kinematic:** Not determined.

- Solvent content:

Organic solvents: 3.0 %**Water:** 92.6 %**- 9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity Stable under normal conditions

- 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.

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- 10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects**- Acute toxicity** Based on available data, the classification criteria are not met.**- LD/LC50 values that are relevant for classification:****111-76-2 2-butoxyethanol**

Oral LD50 1480 mg/Kg (rat)

Dermal LD50 400 mg/Kg (rab)

107-98-2 1-methoxypropan-2-ol

Oral LD50 5000 mg/Kg (rat)

Dermal LD50 13500 mg/Kg (rbt)

LC50/4 h 6 mg/L (rat)

67-63-0 propan-2-ol

Oral LD50 5840 mg/Kg (rat)

Dermal LD50 13400 mg/Kg (rab)

LC50/4 h 30 mg/L (rat)

91-64-5 Coumarin

Oral LD50 293 mg/Kg (rat)

106-22-9 Citronellol

Oral LD50 3450 mg/Kg (rat)

Dermal LD50 2650 mg/Kg (rbt)

128-37-0 2,6-di-tert-butyl-p-cresol

Oral LD50 890 mg/Kg (rat)

- Primary irritant effect:**- Skin corrosion/irritation** Based on available data, the classification criteria are not met.**- Serious eye damage/irritation** Based on available data, the classification criteria are not met.**- Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.**- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)****- 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** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity**- Aquatic toxicity:****111-76-2 2-butoxyethanol**

LC50/96 h 1474 mg/L (Fish)

EC50/48 h 1550 mg/L (Daphnia)

EC50/96 h 911 mg/L (Algae)

EC50/72h 1840 mg/L (Algae)

- 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.

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- 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 bodies or sewage system.**The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.***- 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***Smaller quantities can be disposed with household waste.**Must not be disposed of together with household garbage. Do not allow product to reach sewage system.**Can be deposited with household garbage with prior chemical-physical or biological treatment following consultations with the operator of the waste disposal facility and the pertinent authorities and under adherence to the necessary technical regulations.***- Uncleaned packagings:****- Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****- UN-Number****- ADR, IMDG, IATA**

Void

- 14.2 UN proper shipping name**- ADR, IMDG, IATA**

Void

- 14.3 Transport hazard class(es)**- ADR, IMDG, IATA****- Class**

Void

- Packing group**- ADR, IMDG, IATA**

Void

- 14.5 Environmental hazards:

Not applicable.

- 14.6 Special precautions for user

Not applicable.

- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

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.**- National regulations****- Classification according to VbF:** Void

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- Technical instructions (air):

Class	Share in %
Wasser	92.6
NK	3.0

- Water hazard 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

- Relevant phrases*H225 Highly flammable liquid and vapour.**H226 Flammable liquid and vapour.**H302 Harmful if swallowed.**H312 Harmful in contact with skin.**H315 Causes skin irritation.**H319 Causes serious eye irritation.**H332 Harmful if inhaled.**H336 May cause drowsiness or dizziness.***- Department issuing data specification sheet:** Ma-Fra Laboratories**- Contact:** lab@mafra.it**- 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)**VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)**PNEC: Predicted No-Effect Concentration (REACH)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 2: Flammable liquids – Category 2**Flam. Liq. 3: Flammable liquids – Category 3**Acute Tox. 4: Acute toxicity – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3***- * Data compared to the previous version altered.**