

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 23.09.2010

Revision: 06.09.2010

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** *Futurabond M*
- **Application of the substance / the preparation** *Bonding*
- **Manufacturer/Supplier:**
*VOCO GmbH
Anton-Flettner-Str. 1-3
D-27472 Cuxhaven*
- **Further information obtainable from:** *Scientific department tel. +49 (0)4721-719-0*
- **Information in case of emergency:** *Poison Control Center Mainz +49 (0)6131-19240*

2 Hazards identification

- **Hazard description:**
C Corrosive
- **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.
R 34 Causes burns.
R 43 May cause sensitisation by skin contact.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** *Mixture of substances listed below with nonhazardous additions.*

- **Dangerous components:**

CAS: 72869-86-4 EINECS: 276-957-5	Urethanedimethacrylate	R 52/53	25-50%
CAS: 64-17-5 EINECS: 200-578-6	ethanol	F; R 11	10-25%
	Acidic adhesive monomer	C; R 34-36/38	5-10%
CAS: 868-77-9 EINECS: 212-782-2	2-hydroxyethyl methacrylate	Xi; R 36/38	2.5-5%
	Catalyst	Xn, Xi, N; R 20/22-36/38-50	≤ 2.5%

4 First aid measures

- **After inhalation:** *Seek medical treatment in case of complaints.*
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
- **After swallowing:** *Drink plenty of water and provide fresh air. Call for a doctor immediately.*

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** *No special measures required.*

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6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - Use neutralizing agent.
 - Dispose contaminated material as waste according to item 13.
 - Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
 - **Information for safe handling:** For dental use only.
 - **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
 - See storage instructions on package
 - Keep container tightly sealed.

8 Exposure controls/personal protection

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

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

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
 - 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.
- **Penetration time of glove material**
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties

- **General Information**

Form: Fluid

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Colour:	Yellowish
Odour:	Characteristic
· Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.	
· Flash point:	26°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density:	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· pH-value at 20°C:	2

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

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

Acidic adhesive monomer

Oral	LD50	> 2000 mg/kg (rat)
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· **Primary irritant effect:**

· **on the skin:** Caustic effect on skin and mucous membranes.

· **on the eye:** Strong caustic effect.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

· **Sensitisation** May cause sensitisation by skin contact.

12 Ecological information

· **Additional ecological information:**

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

13 Disposal considerations

· **Product:**

· **Recommendation** Smaller quantities can be disposed of with household waste.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

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· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 38
- **UN-Number:** 2924
- **Packaging group:** III
- **Hazard label:** 3+8
- **Description of goods:** 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ETHANOL (ETHYL ALCOHOL), Acidic adhesive monomer)
- **Limited quantities (LQ) LQ7**
- **Transport category** 3
- **Tunnel restriction code** D/E

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 2924
- **Label** 3+8
- **Packaging group:** III
- **EMS Number:** F-E,S-C
- **Marine pollutant:** No
- **Proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ETHANOL (ETHYL ALCOHOL), Acidic adhesive monomer)

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 2924
- **Label** 3+8
- **Packaging group:** III
- **Proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ETHANOL, Acidic adhesive monomer)

15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



C Corrosive

· **Hazard-determining components of labelling:**

2-hydroxyethyl methacrylate

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*Acidic adhesive monomer***· Risk phrases:**

34 Causes burns.

43 May cause sensitisation by skin contact.

· Safety phrases:

7 Keep container tightly closed.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· Special labelling of certain preparations:

Contains 2-hydroxyethyl methacrylate. May produce an allergic reaction.

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: Scientific departement**· Contact:** Tel.: +49 (0)4721-719-0

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