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

· 1.1 Product identifier

• Trade name: Solobond M

• 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

· Application of the substance / the mixture Bonding

 \cdot 1.3 Details of the supplier of the safety data sheet

• Manufacturer/Supplier: VOCO GmbH Anton-Flettner-Str. 1-3 D-27472 Cuxhaven

• Further information obtainable from: Scientific department tel. +49 (0)4721-719-0

• 1.4 Emergency telephone number: Poison Control Center Mainz +49 (0)6131-19240

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

As a medical device the product is not subject to labelling regulations under 1272/2008/EC.

· Hazard pictograms GHS02, GHS07

· Hazard statements

Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation.

May cause an allergic skin reaction.

· Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Wear protective gloves / eye protection. Wear protective clothing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

• 2.3 Other hazards Use only for intended scope of application

- · 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 listed below with nonhazardous additions.

| · Dangerous components: | | | | |
|-------------------------|---|----------------|--|--|
| | | 50-100% | | |
| EINECS: 200-662-2 | Flam. Liq. 2, H225 | | | |
| | <i>Eye Irrit.</i> 2, <i>H319; STOT SE 3, H336</i> | | | |
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| CAS: 1565-94-2 | BIS GMA | 10-25% |
| | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 | |
| CAS: 868-77-9 | 2-hydroxyethyl methacrylate | 5-10% |
| EINECS: 212-782-2 | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 | |
| | Acidic adhesive monomer | 5-10% |
| | Skin Corr. 1B, H314 Eye Irrit. 2, H319 | |
| | Catalyst | ≤ 2.5% |
| | Aquatic Acute 1, H400 Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. H319 | 2, |

SECTION 4: First aid measures

· 4.1 Description of 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. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot 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, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: 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 Ensure adequate ventilation
- 6.2 Environmental precautions: No special measures required.
- 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 disposal information.

SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling
- For dental use only.
- Prevent formation of aerosols.
- · Information about fire and explosion protection: Keep ignition sources away Do not smoke.

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- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: See storage instructions on package
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- 7.3 Specific end use(s) No further relevant information available.

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:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- *The usual precautionary measures are to be adhered to when handling chemicals. Avoid contact with the eyes and skin.*
- · Protection of hands:



Protective gloves

· Material of gloves Not applicable.

• Eye protection: Safety glasses

| • 9.1 Information on basic physic | cal and chemical properties |
|------------------------------------|---|
| · General Information | cui una chemicai properties |
| · Appearance: | |
| Form: | Fluid |
| Colour: | Yellow |
| · Odour: | Characteristic |
| · pH-value: | Not determined. |
| · Change in condition | |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |
| · Flash point: | <15 °C |
| · Self-igniting: | Product is not selfigniting. |
| · Danger of explosion: | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · Density at 20 •C: | 0.9 g/cm ³ |
| · Solubility in / Miscibility with | |
| water: | Not miscible or difficult to mix. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |

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• 9.2 Other information

No further relevant information available.

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.

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 relevant for classification:

67-64-1 acetone

Oral LD50 5800 mg/kg (rat)

Dermal LD50 20000 mg/kg (rabbit)

Acidic adhesive monomer

$Oral \quad LD50 > 2000 \text{ mg/kg (rat)}$

Primary irritant effect:

· Skin corrosion/irritation

- Testing according to ISO 10993-1/10993-10 showed no skin irritation for this product when fully cured Causes skin irritation.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation
- May cause an allergic skin reaction.
- · CMR effects (carcinogenity, 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: 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
- · 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

• Recommendation Smaller quantities can be disposed of with household waste.

· Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

| 14.1 UN-Number | |
|---|--|
| ADR, IMDG, IATA | UN2924 |
| 14.2 UN proper shipping name | |
| ADR | 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S |
| | (ACETONE, Acidic adhesive monomer) |
| IMDG, IATA | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ACETON) Acidic adhesive monomer) |
| 14.3 Transport hazard class(es) | , |
| ADR | |
| | |
| | |
| Class | 3 Flammable liquids. |
| Label | 3+8 |
| IMDG | |
| | |
| Class | 3 Flammable liquids. |
| Label | 3/8 |
| | |
| Class | 3 Flammable liquids. |
| Label | 3 (8) |
| 14.4 Packing group | |
| ADR, IMDG, IATA | 11 |
| 14.5 Environmental hazards: Marine pollutant: | No |
| 14.6 Special precautions for user | Warning: Flammable liquids. |
| Danger code (Kemler): | 338 |
| EMS Number: | F- E , S - C |
| Stowage Category | В |
| Stowage Code | SW2 Clear of living quarters. |
| 14.7 Transport in bulk according to Anne Marmal and the IBC Code | |
| Marpol and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| ADR Limited quantities (LQ) | 1L |

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| · Transport category | 2 | | | |
| · Tunnel restriction code | D/E | | | |
| · UN ''Model Regulation'': | UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ACETONE, ACIDIC ADHESIVE MONOMER), 3 (8), II | | | |

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 P5c FLAMMABLE LIQUIDS

• Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

• Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

• REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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 SDS: Scientific department

· Contact: Tel.: +49 (0)4721-719-0

· 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) 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 Acute Tox. 4: Acute toxicity - Category 4 Skin Corr. 1B: Skin corrosion/irritation - Category 1B Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2 Skin Sens. 1: Skin sensitisation – Category 1 STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1 \cdot * Data compared to the previous version altered.