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

· 1.1 Product identifier
  · Trade name: Grandio Flow

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

· 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
    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 GHS07
    · Hazard statements
      May cause an allergic skin reaction.
    · Precautionary statements
      Wear protective gloves / protective clothing.
      If skin irritation or rash occurs: Get medical advice/attention.
      IF ON SKIN: Wash with plenty of water.
      Dispose of contents/container in accordance with local/regional/national/international regulations.
  · 2.3 Other hazards
    · Use only for intended scope of application

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures
  · Description: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 6606-59-3</td>
<td>1,6-hexanediyl bismethacrylate</td>
</tr>
<tr>
<td>EINECS: 229-551-7</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335</td>
</tr>
<tr>
<td></td>
<td>5-10%</td>
</tr>
<tr>
<td>CAS: 1565-94-2</td>
<td>BIS GMA</td>
</tr>
<tr>
<td></td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317</td>
</tr>
<tr>
<td></td>
<td>2.5-5%</td>
</tr>
<tr>
<td>CAS: 109-16-0</td>
<td>Triethylene glycol dimethacrylate</td>
</tr>
<tr>
<td>EINECS: 203-652-6</td>
<td>Skin Sens. 1, H317</td>
</tr>
<tr>
<td></td>
<td>≤ 2.5%</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

· 4.1 Description of first aid measures
  · General information: No special measures required.
  · 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: If symptoms persist consult doctor.
**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
  - Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **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** Not required.

- **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.

- **7.2 Conditions for safe storage, including any incompatibilities**
  - 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.

- **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.
    - Respiratory protection: Not required.
  - 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 cannot be calculated in advance and has therefore to be checked prior to the application.

- **Eye protection:** Safety glasses

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

- **General Information**

  - **Appearance:**
    - **Form:** Viscous
    - **Colour:** According to product specification
  - **Odour:** Characteristic
  - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.

- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Density:** Not determined.

- **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.

#### 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.
- Primary irritant effect:
  - Skin corrosion/irritation: Testing according to ISO 10993-1/10993-10 showed no skin irritation for this product when fully cured.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- 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.

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

- 14.1 UN-Number
  - ADR, ADN, IMDG, IATA: Void
- 14.2 UN proper shipping name
  - ADR, ADN, IMDG, IATA: -
- 14.3 Transport hazard classes:
  - ADR, ADN, IMDG, IATA: -
  - Class: Void
- 14.4 Packing group
  - ADR, IMDG, IATA: -
  - Void
Trade name: Grandio Flow

14.5 Environmental hazards:
- Marine pollutant: No

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.

UN "Model Regulation": Void

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.
- 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)
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - 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
- * Data compared to the previous version altered.