This SDS packet was issued with item:
077033707

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

077033517 077033525 077033533 077033541 077033558 077033566 077033574 077033715 077033723 077033731
077033749 077033756 077033764 077033772 077033780 077033798 077033806 077033814 077033822 077033830
1 Identification

- Product identifier
  - Trade name: GrandioSO Heavy Flow
  - Relevant identified uses of the substance or mixture and uses advised against
    No further relevant information available.
  - Application of the substance / the mixture Dental filling material
  - Details of the supplier of the safety data sheet
    Manufacturer/Supplier:
    VO CO GmbH
    Anton-Flettner-Str. 1-3
    D-27472 Cuxhaven
    Information department: Scientific department tel. +49 (0)4721-719-0
    Emergency telephone number: Scientific department tel. +49 (0)4721-719-0

2 Hazard(s) identification

Health effects are based on the unmixed uncured material.
Under FDA regulations this product is classified as a medical device.
Medical devices are exempt from the labelling provisions of GHS according to the Hazard Communication Standard (HCS).

- Classification of the substance or mixture
  The product is not classified according to the Globally Harmonized System (GHS).

- Label elements
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void

- Precautionary statements
  Wear protective gloves / protective clothing.
  If skin irritation or rash occurs: Get medical advice attention.
  IF ON SKIN: Wash with plenty of soap and water.
  Other hazards Use only for intended scope of application
  Results of PBT and vPvB assessment
  PBT: Not applicable.
  vPvB: Not applicable.

3 Composition/information on ingredients

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

- Dangerous components:
<table>
<thead>
<tr>
<th>Component ID</th>
<th>Component Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1565-94-2</td>
<td>BIS-GMA</td>
<td>2.5-5%</td>
</tr>
<tr>
<td>109-16-0</td>
<td>Triethylene glycol dimethacrylate</td>
<td>2.5-5%</td>
</tr>
<tr>
<td>41637-38-1</td>
<td>BIS-EMA</td>
<td>2.5-5%</td>
</tr>
</tbody>
</table>

4 First-aid measures

- 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.
  - After swallowing: If symptoms persist consult doctor.
  - Most important symptoms and effects, both acute and delayed No further relevant information available.
Trade name: GrandioSO Heavy Flow

Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures
- Extinguishing media
- Suitable extinguishing agents:
  - CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture
  - No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures
- Personal precautions, protective equipment and emergency procedures
  - Not required.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
  - Pick up mechanically.
- 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.

7 Handling and storage
- Precautions for safe handling
  - For dental use only.
- Information about protection against explosions and fires: No special measures required.
- 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
- Specific end uses: No further relevant information available.

8 Exposure controls/personal protection
- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- Components 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 that were valid during the creation were used as basis.
- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:
  - The usual precautionary measures for handling chemicals should be followed.
  - Breathing equipment: 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 can not be calculated in advance and has therefore to be checked prior to the use.
Trade name: GrandioSO Heavy Flow

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - Form: Fluid
    - Color: According to product specification
    - Odor: Characteristic
  - **pH-value:** Not determined.
  - **Change in condition**
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: Undetermined.
  - **Flash point:** Not applicable.
  - **Auto igniting:** Product is not self-igniting.
  - **Danger of explosion:** Product does not present an explosion hazard.
  - **Density:** Not determined.
  - **Solvability in / Miscibility with Water:** Not miscible or difficult to mix.
  - **Viscosity:**
    - Dynamic: Not determined.
    - Kinematic: Not determined.
  - **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
  - **Primary irritant effect:**
    - on the skin:
      - Testing according to ISO 10993-110993-10 showed no skin irritation for this product when fully cured
      - No irritant effect
    - on the eye:
      - No irritating effect
  - **Sensitization:** Sensitization possible through skin contact.
  - **Additional toxicological information:**
  - **Carcinogenic categories**
    - IARC (International Agency for Research on Cancer)
      - 128-37-0 2,6-di-tert-butyl-p-cresol
12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability No further relevant information available.
  - Bioaccumulative potential No further relevant information available.
  - Mobility in soil No further relevant information available.
- Additional ecological information:
  - General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water
  - Results of PBT and vPoE assessment
    - PBT: Not applicable.
    - vPoE: Not applicable.
    - Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation:
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT, ADR, ADN, IMDG, IATA Void
- UN proper shipping name
  - DOT, ADR, ADN, IMDG, IATA Void
- Transport hazard class(es)
  - DOT, ADR, ADN, IMDG, IATA
  - Class Void
- Packing group
  - DOT, ADR, IMDG, IATA Void
- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user
  - Not applicable.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
  - Not applicable.
- UN "Model Regulation":

(Contd. on page 5)
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - SARA
    - Section 355 (extremely hazardous substances):
      None of the ingredients are listed.
    - Section 313 (Specific toxic chemical listings):
      None of the ingredients are listed.
    - TSCA (Toxic Substances Control Act):
      All ingredients are listed.
    - Proposition 65
      - Chemicals known to cause cancer:
        None of the ingredients are listed.
      - Chemicals known to cause reproductive toxicity for females:
        None of the ingredients are listed.
      - Chemicals known to cause reproductive toxicity for males:
        None of the ingredients are listed.
      - Chemicals known to cause developmental toxicity:
        None of the ingredients are listed.
      - Cancerogenity categories
      - EPA (Environmental Protection Agency)
        None of the ingredients are listed.
      - TLV (Threshold Limit Value established by ACGIH)
        128-37-0 2,6-di-tert-butyl-p-cresol
      - NIOSH-Ca (National Institute for Occupational Safety and Health)
        None of the ingredients are listed.
      - GHS label elements
        - Void
      - Hazard pictograms
        - Void
      - Signal word
        - Void
      - Hazard statements
        - Void
      - Precautionary statements
        - Wear protective gloves / protective clothing.
        - If skin irritation or rash occurs: Get medical advice/attention.
        - IF ON SKIN: Wash with plenty of soap and water.

16 Other information

The information contained herein is based on our present knowledge and is believed to be correct at the date issued. The information is subject to change without notice. However, all information, statements, recommendations or suggestions shall not constitute any guarantee, representation or warranty, expressed or implied.

Final determination whether the product is fit and suitable for a particular purpose and the user's method of use or application is the sole responsibility of the user.

- Department issuing MSDS: Scientific department
- Contact: Tel.: +49 (0)4721-719-0
- Date of preparation / last revision: 05/07/2015 / 16
- 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
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
**Safety Data Sheet**  
*acc. to OSHA HCS*

**Trade name:** GrandioSO Heavy Flow

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**EINRUS:** European inventory of Existing Commercial Chemical Substances  
**EHNS:** European List of Notified Chemical Substances  
**CAS:** Chemical Abstracts Service (division of the American Chemical Society)
SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
  - Trade name: GrandioSO Heavy Flow

- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  - Application of the substance / the mixture: Dental filling material

- 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
    The product is not classified according to the CLP regulation.

- 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: Void
  - Hazard statements: Void
  - Precautionary statements
    Wear protective gloves / protective clothing.
    If skin irritation or rash occurs: Get medical advice/attention.
    IF ON SKIN: Wash with plenty of soap and water.
  - Additional information: Contains BIS GMA, Triethylene glycol dimethacrylate. May produce an allergic reaction.

- 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.

<table>
<thead>
<tr>
<th>CAS</th>
<th>Name</th>
<th>Hazard Classifications</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1565-94-2</td>
<td>BIS GMA</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317</td>
<td>2.5-5%</td>
</tr>
<tr>
<td>109-16-0</td>
<td>Triethylene glycol dimethacrylate</td>
<td>Skin Sens. 1, H317</td>
<td>2.5-5%</td>
</tr>
<tr>
<td>41637-38-1</td>
<td>BIS-EMA</td>
<td>Aquatic Chronic 4, H413</td>
<td>2.5-5%</td>
</tr>
</tbody>
</table>

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.
  - After swallowing: If symptoms persist consult doctor.

- 4.2 Most important symptoms and effects, both acute and delayed
  No further relevant information available.

(Contd. on page 2)
**Trade name:** GrandioSO Heavy Flow  

### 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:**  
  - Pick up mechanically.  

- **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.  

- **Information about fire - and explosion protection:**  
  - No special measures required.  

- **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 can not be calculated in advance and has therefore to be checked prior to the use.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
   - General Information
     - Appearance: Fluid
     - Colour: According to product specification
   - Odour: Characteristic
   - pH-value: 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.
   - Possibility of hazardous reactions: No dangerous reactions known.
   - Conditions to avoid: No further relevant information available.
   - Incompatible materials: No further relevant information available.
   - 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.
     - 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.

(Contd. on page 4)
SECTION 12: Ecological information

12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Bioaccumulative potential: No further relevant information available.
- 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

12.2 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

12.5 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: Void

14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA: Void

14.4 Packing group
- ADR, IMDG, IATA: Void

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.

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
  - Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

* Data compared to the previous version altered.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
- Trade name: GrandioSO Heavy 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
- 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
  The product is not classified according to the CLP regulation.

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 Void
- Hazard statements Void
- Precautionary statements
  Wear protective gloves / protective clothing.
  IF ON SKIN: Wash with plenty of soap and water.
  Additional information:
  Contains BIS GMA, Triethylene glycol dimethacrylate. May produce an allergic reaction.
- 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:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Substance</th>
<th>Skin Irr. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317</th>
<th>Aquatic Chronic 4, H413</th>
</tr>
</thead>
<tbody>
<tr>
<td>1565-94-2</td>
<td>BIS GMA</td>
<td>2.5-5%</td>
<td>2.5-5%</td>
</tr>
<tr>
<td>109-16-0 EINECS: 203-652-6 Triethylene glycol dimethacrylate</td>
<td>2.5-5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41637-38-1 EC number: 609-946-4 BIS-EMA</td>
<td>Skin Sens. 1, H317</td>
<td>Aquatic Chronic 4, H413</td>
<td></td>
</tr>
</tbody>
</table>

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.
- After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.

(Contd. on page 2)
Trade name: GrandioSO Heavy Flow

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:
- Pick up mechanically.

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.
- Information about fire and explosion protection: No special measures required.

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

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
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- General Information
  - Form: Fluid
  - Colour: According to product specification
  - Odour: Characteristic
  - pH-value: 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

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
  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.
Trade name: GrandioSO Heavy Flow

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.

12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

13.1 Waste treatment methods
- Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system.

13.2 Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

14.1 UN-Number
- ADR, ADN, IMDG, IATA: Void

14.2 UN proper shipping name
- ADR, ADN, IMDG, IATA: Void

14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA: Void

14.4 Packing group
- ADR, IMDG, IATA: Void

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.

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
- Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

* Data compared to the previous version altered.