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

- **Product identifier**
  - **Trade name:** Venus Bulk Fill

- **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:** Heraeus Kulzer Australia Pty Ltd
    Unit 32
    11 – 21 Underwood Rd
    HOMEBUSH NSW 2140
    Australia
  - **Tel:** +61 (0) 2 9764 5222

- **Informing department:** see above

- **Emergency telephone number:** Emergency contact number: 13 11 26 (24 hours)

2 Hazards identification

- **Classification of the substance or mixture**
  - Skin Irrit. 2 H315 Causes skin irritation.
  - Eye Irrit. 2 H319 Causes serious eye irritation.

- **Label elements**
  - **GHS label elements**
    The product is classified and labelled according to the Globally Harmonised System (GHS).
  - **Hazard pictograms**
    GHS07

- **Signal word** Warning

- **Hazard statements**
  - Causes skin irritation.
  - Causes serious eye irritation.

- **Precautionary statements**
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Wash thoroughly after handling.
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Specific treatment (see on this label).
  - If skin irritation occurs: Get medical advice/attention.
  - If eye irritation persists: Get medical advice/attention.

- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
Trade name: Venus Bulk Fill

· vPvB: Not applicable.

3 Composition/information on ingredients
   · Chemical characterisation: Mixtures
   · Description: -
   · Dangerous components:
     - CAS: 13760-80-0
       EINECS: 237-354-2
       ytterbium trifluoride
       Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335
       10-25%
     - CAS: 109-16-0
       EINECS: 203-652-6
       triethylen glycol dimethacrylate
       Skin Sens. 1B, H317
       < 1%

4 First aid measures
   · 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: Instantly wash with water and soap and rinse thoroughly.
     · After eye contact: Rinse opened eye for several minutes under running water.
     · After swallowing: Rinse out mouth and then drink plenty of water.
       In case of persistent symptoms consult doctor.
   · Information for doctor
     · Most important symptoms and effects, both acute and delayed: No further relevant information available.
     · Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Firefighting measures
   · Extinguishing media
     · Suitable extinguishing agents: CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
       Use fire fighting measures that suit the environment.
   · Special hazards arising from the substance or mixture: No further relevant information available.
   · Advice for firefighters
     · Protective equipment: No special measures required.
   · Additional information -

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: Collect mechanically.
   · Reference to other sections
     See Section 13 for information on disposal.
     See Section 8 for information on personal protection equipment.
Trade name: Venus Bulk Fill

7 Handling and storage

- Handling
  - Precautions for safe handling: No special measures required.
  - 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 containers: No special requirements.
    - Information about storage in one common storage facility: Not required.
    - Further information about storage conditions:
      - Store under dry conditions.
      - Store cool (not above 25 °C).

- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Control parameters
  - Components with critical 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.

- DNELs
  - 109-16-0 triethylen glycol dimethacrylate
    - Dermal worker industr., l.te., syst. 13.9 mg/Kg/d (nd)
    - Inhalative worker industr., l.te., syst. 48.5 mg/m3 (nd)

- PNECs
  - 109-16-0 triethylen glycol dimethacrylate
    - marine water 0.0164 mg/l (nd)
    - sedim., dw, fre.wat. 1.85 mg/Kg (nd)
    - sedim., dw, mar.wat. 0.185 mg/Kg (nd)
    - soil,dw 0.274 mg/Kg (nd)

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

- Exposure controls
  - Personal protective equipment
    - General protective and hygienic measures
      - Wash hands during breaks and at the end of the work.
    - Breathing equipment: Not required.
    - Protection of hands:
      - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
      - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
      - Check protective gloves prior to each use for their proper condition.
recommended

- **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.

- **Penetration time of glove material**
  The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
  - Butyl rubber, BR
  - Nitrile rubber, NBR

- **Eye protection:** Safety glasses

- **Body protection:** Light weight protective clothing

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:** Pasty
    - **Colour:** White
    - **Smell:** Odourless
    - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.
  - **Change in condition**
    - **Melting point/Melting range:** Not determined
    - **Boiling point/Boiling range:** Not determined
  - **Flash point:** > 100 °C
  - **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.

- **Steam pressure:** Not determined.

- **Density at 20 °C**
  - **Relative density:** 1.9 g/cm³
  - **Vapour density:** Not determined.
Trade name: Venus Bulk Fill

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability:
  - Conditions to be avoided: No decomposition if used and stored 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: None.
- Additional information: -

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity
    - LD/LC50 values that are relevant for classification:
      | Compound | Oral LD50 | Dermal LD50 |
      |----------|-----------|-------------|
      | 56744-60-6 Bisphenol-A-ethoxylat(4)dimethacrylat | >2000 mg/kg (rat) | >2000 mg/kg (mouse) |
      | 41137-60-4 diurethandimethacrylate | >5000 mg/kg (rat) |
      | 109-16-0 triethylen glycol dimethacrylate | >5000 mg/kg (rat) |

- Primary irritant effect:
  - Skin corrosion/irritation: No irritant effect.
  - Serious eye damage/irritation: No irritant effect.
- Respiratory or skin sensitisation: No sensitizing effect known.
- Additional toxicological information:
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
12 Ecological information

- Toxicity
  - Aquatic toxicity:
    - 109-16-0 triethylene glycol dimethacrylate
      EC50/72h > 100 mg/l (algae)
  - Persistence and degradability: No further relevant information available.
  - Behaviour in environmental systems:
    - Bioaccumulative potential: No further relevant information available.
    - Mobility in soil: No further relevant information available.
  - Additional ecological information:
    - General notes: Avoid transfer into the environment.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation: Smaller quantities can be disposed with household garbage.

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

14 Transport information

- UN-Number
  - ADG, ADN, IMDG, IATA: Void
- UN proper shipping name
  - ADG: Void
  - ADN, IMDG, IATA: Void
- Transport hazard class(es)
  - ADG, ADN, IMDG, IATA: Void
  - Class: Void
- Packing group
  - ADG, IMDG, IATA: Void
- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable.
Trade name: Venus Bulk Fill

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - GHS label elements
    The product is classified and labelled according to the Globally Harmonised System (GHS).
    - Hazard pictograms

  GHS07

  - Signal word Warning
  - Hazard statements
    Causes skin irritation.
    Causes serious eye irritation.
  - Precautionary statements
    Wear protective gloves/protective clothing/eye protection/face protection.
    Wash thoroughly after handling.
    IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    Specific treatment (see on this label).
    If skin irritation occurs: Get medical advice/attention.
    If eye irritation persists: Get medical advice/attention.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  H315 Causes skin irritation.
  H317 May cause an allergic skin reaction.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

- 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
  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)
  DNEL: Derived No-Effect Level (REACH)
  PNEC: Predicted No-Effect Concentration (REACH)
  LC50: Lethal concentration, 50 percent
Trade name: Venus Bulk Fill

LD50: Lethal dose, 50 percent
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. 1B: Skin sensitisation – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.