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

1.1 Product identifier
- Trade name: VITA ENAMIC® GLAZE
- Article number: EENSTG20

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: Light-polymerising lacquer

1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  VITA Zahnfabrik
  H. Rauter GmbH & Co. KG
  PO Box 1338
  D 79704 Bad Säckingen
  Tel.: +49 7761/562-0
  Fax: +49 7761/562 299

- Further information obtainable from:
  VITA Zahnfabrik
  Tel.: +49 7761 562-0
  Fax: +49 7761 562 299
  e-mail: info@vita-zahnfabrik.com

1.4 Emergency telephone number: Tel.: +49 761 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

![GHS02 flame]
- Flam. Liq. 2 H225 Highly flammable liquid and vapour.

![GHS08 health hazard]
- Repr. 2 H361f Suspected of damaging fertility.

![GHS05 corrosion]
- Eye Dam. 1 H318 Causes serious eye damage.

![GHS07]
- Skin Irrit. 2 H315 Causes skin irritation.
- Skin Sens. 1 H317 May cause an allergic skin reaction.
- STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: VITA ENAMIC® GLAZE

- **Hazard pictograms**
  - GHS02
  - GHS05
  - GHS07
  - GHS08

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - methyl methacrylate
  - 2-Propenoic acid, reaction product with Pentaerythrite
  - Diphenyl(2,4,6-trimethylbenzoyl)phosphinoxide
  - Acrylic resin

- **Hazard statements**
  - H225 Highly flammable liquid and vapour.
  - H315 Causes skin irritation.
  - H318 Causes serious eye damage.
  - H317 May cause an allergic skin reaction.
  - H361f Suspected of damaging fertility.
  - H335 May cause respiratory irritation.
  - H412 Harmful to aquatic life with long lasting effects.

- **Precautionary statements**
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P310 Immediately call a POISON CENTER/doctor.
  - P405 Store locked up.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

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**SECTION 3: Composition/information on ingredients**

**3.2 Chemical characterisation: Mixtures**
**Description:** Preparation of methacrylates and amorphous silica.

**Dangerous components:**

| CAS: 80-62-6 | methyl methacrylate | Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335 | 25-50% |
| EINECS: 201-297-1 | | |

| CAS: 1245638-61-2 | Acrylic resin | Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 | 25-50% |
| EC number: 629-850-6 | | |

| CAS: 75980-60-8 | 2-Propenoic acid, reaction product with Pentaerythrite | Eye Dam. 1, H318; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317 | 2.5-10% |
| EINECS: 278-355-8 | | |

| CAS: | Diphenyl(2,4,6-trimethylbenzoyl)phosphinoxide | Repr. 2, H361f; Aquatic Chronic 2, H411; Skin Sens. 1, H317 | 2.5-10% |

(Contd. on page 3)
SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation:
  Supply fresh air and to be sure call for a doctor.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
  If skin irritation continues, consult a doctor.
- After eye contact:
  Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
  Do not induce vomiting.
  Call a doctor immediately.

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

- 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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 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.
- Additional information
  Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Prevent seepage into sewage system, workpits and cellars.
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Use neutralising agent.
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.

- 6.4 Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Avoid contact with skin and eyes.
- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Prevent formation of aerosols.

Information about fire - and explosion protection:
- Keep ignition sources away - Do not smoke.
- Protect against electrostatic charges.
- Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles:
    - Protect from heat and direct sunlight.
    - Store in a cool location.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: Keep container tightly sealed.

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:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Short-term value</th>
<th>Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6 methyl methacrylate</td>
<td>416 mg/m³, 100 ppm</td>
<td>208 mg/m³, 50 ppm</td>
</tr>
</tbody>
</table>

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

8.2 Exposure controls
- General protective and hygienic measures:
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing
  - Wash hands before breaks and at the end of work.
  - Store protective clothing separately.
  - Avoid contact with the eyes and skin.

- Respiratory protection:
  - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- Protection of hands:

Protective gloves should be changed regularly, especially after intensive contact with the product. For every workplace a suitable type of protective gloves must be selected.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Material of gloves**
  Butyl rubber (0,7 mm) EN 374

As there are many different conditions in every day work these indications can only serve as an aid to orientation for the selection of suitable gloves for the handling of chemical products. By no means they can replace qualifying examinations by the end-user.

These recommendations only apply to the product mentioned in the safety data sheet. When mixing with other substances or under conditions deviant from norm EN 374 a manufacturer of CE-approved gloves should be referred to.

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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

- **Eye protection:**
  Tightly sealed goggles

- **Body protection:** Protective work clothing

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### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - **Form:** Fluid
      - **Colour:** Colourless
      - **Odour:** Characteristic
      - **Odour threshold:** Not determined.
    - **pH-value:** Not determined.
  - **Change in condition**
    - **Melting point/freezing point:** Undetermined.
    - **Initial boiling point and boiling range:** >100 °C
  - **Flash point:** 10 °C
  - **Flammability (solid, gas):** Not applicable.
  - **Ignition temperature:** 430 °C
  - **Decomposition temperature:** Not determined.
  - **Auto-ignition temperature:** Product is not selfigniting.
  - **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No dangerous reactions if used according to specifications.
- **10.2 Chemical stability** Stable if used according to specifications.
- **Thermal decomposition / conditions to be avoided:**
  - Protect from heat and direct sunlight.
  - 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 decomposition if used according to specifications.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1245638-61-2 2-Propenoic acid, reaction product with Pentaerythrite</td>
<td>&gt;2,000 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rabbit)</td>
<td>&gt;5 mg/l (rat)</td>
</tr>
<tr>
<td>75980-60-8 Diphenyl(2,4,6-trimethylbenzoyl)phosphinoxide</td>
<td>&gt;5,000 mg/kg (rat)</td>
<td>&gt;2,000 mg/kg (rat) ((OECD 402))</td>
<td></td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
- **Skin corrosion/irritation**
  - Causes skin irritation.
Trade name: VITA ENAMIC® GLAZE

- Serious eye damage/irritation
  Causes serious eye damage.
- 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
  Suspected of damaging fertility.
- STOT-single exposure
  May cause respiratory irritation.
- 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.
- Ecotoxic effects:
  - Remark: Harmful to fish
- Additional ecological information:
- General notes:
  Do not allow product to reach ground water, water course or sewage system.
  Must not reach sewage water or drainage ditch undiluted or unneutralised.
  Danger to drinking water if even small quantities leak into the ground.
  Harmful to aquatic organisms.
- 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.
  Disposal must be made according to official regulations.

<table>
<thead>
<tr>
<th>European waste catalogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 3</td>
</tr>
<tr>
<td>HP 4</td>
</tr>
<tr>
<td>HP 5</td>
</tr>
<tr>
<td>HP 10</td>
</tr>
<tr>
<td>HP 13</td>
</tr>
<tr>
<td>HP 14</td>
</tr>
</tbody>
</table>

(Contd. on page 8)
### SECTION 14: Transport information

- **14.1 UN-Number**
  - ADR, IMDG, IATA
  - UN1247

- **14.2 UN proper shipping name**
  - ADR
    - 1247 METHYLMETHACRYLAT, MONOMER, STABILISIERT, LÖSUNG
  - IMDG, IATA
    - METHYL METHACRYLATE MONOMER, STABILIZED, SOLUTION

- **14.3 Transport hazard class(es)**
  - ADR, IMDG, IATA
    - Class: 3 Flammable liquids.
    - Label: 3

- **14.4 Packing group**
  - ADR, IMDG, IATA
  - II

- **14.5 Environmental hazards:**
  - Marine pollutant: No

- **14.6 Special precautions for user**
  - Warning: Flammable liquids.
  - Danger code (Kemler): 339
  - EMS Number: F-E,S-D
  - Stowage Category: B
  - Stowage Code: SW2 Clear of living quarters.

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.

- **Transport/Additional information:**
  - ADR
    - Limited quantities (LQ): 1L
  - Excepted quantities (EQ)
    - Code: E2
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 500 ml
  - Transport category: 2
  - Tunnel restriction code: D/E

- **IMDG**
  - Limited quantities (LQ): 1L
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.07.2018  Version number 3  Revision: 24.07.2018

Trade name: VITA ENAMIC® GLAZE

- Excepted quantities (EQ)
  - Code: E2
  - Maximum net quantity per inner packaging: 30 ml
  - Maximum net quantity per outer packaging: 500 ml

- UN "Model Regulation":
  - UN 1247 METHYL METHACRYLATE MONOMER, STABILIZED, 3, 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, 40

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

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.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H318 Causes serious eye damage.
  - H319 Causes serious eye irritation.
  - H335 May cause respiratory irritation.
  - H361f Suspected of damaging fertility.
  - H411 Toxic to aquatic life with long lasting effects.

- Abbreviations and acronyms:
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organisation
  - 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 Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - Skin Sens. 1: Skin sensitisation – Category 1
  - Repr. 2: Reproductive toxicity – Category 2
Trade name: VITA ENAMIC® GLAZE

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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