1. Identification

Product identifier
VITA VM LC OPAQUE LIQUID

Recommended use of the chemical and restrictions on use
Use of the substance/mixture
Use as laboratory reagent

Details of the supplier of the safety data sheet
Company name: VITA Zahnfabrik H.Rauter GmbH & Co.KG
Post-office box: 1338
79704 Bad Säckingen
Telephone: +49(0)7761-562-0
Telefax: +49(0)7761-562-299
E-mail: info@vita-zahnfabrik.com
Internet: www.vita-zahnfabrik.com

Emergency phone number:
+49-(0)761-19240

Further Information
medical device

2. Hazard(s) identification

Classification of the chemical
29 CFR Part 1910.1200
Flammable liquids: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Respiratory or skin sensitization: Skin Sens. 1
Specific target organ toxicity single exposure: STOT SE 3 (respiratory tract irritation)

Label elements
29 CFR Part 1910.1200
Signal word: Danger

Pictograms:

Hazard statements
Highly flammable liquid and vapor
Causes skin irritation
May cause an allergic skin reaction
May cause respiratory irritation

Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep container tightly closed.

Hazards not otherwise classified
No information available.

3. Composition/information on ingredients

Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>97-90-5</td>
<td>ethylene dimethacrylate</td>
<td>55.48 %</td>
</tr>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate</td>
<td>23.88 %</td>
</tr>
<tr>
<td>72869-86-4</td>
<td>7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers)</td>
<td>13.59 %</td>
</tr>
<tr>
<td>10373-78-1</td>
<td>Camphorquinone</td>
<td>2.3 %</td>
</tr>
<tr>
<td>2867-47-2</td>
<td>2-dimethylaminoethyl methacrylate</td>
<td>2.277 %</td>
</tr>
<tr>
<td>868-77-9</td>
<td>2-hydroxyethyl methacrylate</td>
<td>1.144 %</td>
</tr>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate; methyl 2-methylprop-2-enolate; methyl 2-methylpropenoate</td>
<td>0.572 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

**Description of first aid measures**

**After inhalation**
Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

**After contact with skin**
After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

**After contact with eyes**
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**
Rinse mouth immediately and drink plenty of water.

**Most important symptoms and effects, both acute and delayed**
No information available.

**Indication of any immediate medical attention and special treatment needed**
Treat symptomatically.

5. Fire-fighting measures

**Extinguishing media**
 Suitable extinguishing media
Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media
Water.

**Specific hazards arising from the chemical**
Highly flammable. Vapors may form explosive mixtures with air.

**Special protective equipment and precautions for fire-fighters**
Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**
Use water spray/stream to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Remove all sources of ignition. Do not breathe gas/fume/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.
Environmental precautions
Do not allow uncontrolled discharge of product into the environment. Explosion risk.

Methods and material for containment and cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections
Safe handling: see section 7
Personal protection equipment (PPE): see section 8
Disposal: see section 13

7. Handling and storage

Precautions for safe handling
Advice on safe handling
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapour/spray.

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may form explosive mixtures with air.

Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage
Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>f/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>100</td>
<td>410</td>
<td></td>
<td>TWA (8 h)</td>
<td>PEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>410</td>
<td></td>
<td>TWA (8 h)</td>
<td>REL</td>
</tr>
</tbody>
</table>

Exposure controls

Appropriate engineering controls
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapour/spray.

Protective and hygiene measures
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Eye/face protection
Wear eye protection/face protection.
Hand protection
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Recommended glove articles KCL Vitoject Breakthrough time (maximum wearing time) 30 min FKM (fluoro rubber)

Skin protection
Flame-retardant protective clothing. Wear anti-static footwear and clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Provide adequate ventilation as well as local exhaustion at critical locations. Technical ventilation of workplace

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state: Liquid</td>
</tr>
<tr>
<td>Color: light yellow</td>
</tr>
<tr>
<td>Odor: characteristic</td>
</tr>
<tr>
<td>pH-Value: not determined</td>
</tr>
</tbody>
</table>

Changes in the physical state
Melting point/freezing point: not determined
Initial boiling point and boiling range: 101 °C
Flash point: 10 °C

Flammability
Solid: not applicable
Gas: not applicable

Explosive properties
The product is not: Explosive.
Lower explosion limits: 2,1 vol. %
Upper explosion limits: 12,5 vol. %

Auto-ignition temperature
Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties
Not oxidising.

Vapor pressure: <=1100 hPa
(at 50 °C)

Density: not determined

Water solubility: No

Solubility in other solvents
not determined

Partition coefficient: not determined

Vapor density: not determined

Evaporation rate: not determined

Other information
10. Stability and reactivity

Reactivity
Highly flammable.

Chemical stability
The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions
No known hazardous reactions.

Conditions to avoid
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air.

Incompatible materials
No information available.

Hazardous decomposition products
No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Acute toxicity
Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>97-90-5</td>
<td>ethylene dimethacrylate</td>
<td>dermal</td>
<td>LD50</td>
<td>3300</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate</td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>2867-47-2</td>
<td>2-dimethylaminoethyl methacrylate</td>
<td>oral</td>
<td>ATE</td>
<td>500</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>ATE</td>
<td>1100</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>868-77-9</td>
<td>2-hydroxyethyl methacrylate</td>
<td>oral</td>
<td>LD50</td>
<td>5050</td>
<td>mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate; methyl 2-methylprop-2-enate; methyl 2-methylpropenoate</td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes skin irritation
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitizing effects
May cause an allergic skin reaction (ethylene dimethacrylate; methyl methacrylate; 7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers); 2-dimethylaminoethyl methacrylate; 2-hydroxyethyl methacrylate; methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate)

**Carcinogenic/mutagenic/toxic effects for reproduction**
Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure**
May cause respiratory irritation (methyl methacrylate; ethylene dimethacrylate)

**Specific target organ toxicity (STOT) - repeated exposure**
Based on available data, the classification criteria are not met.

**Carcinogenicity (IARC):** Methyl methacrylate (CAS 80-62-6) is listed in group 3. Methyl methacrylate (CAS 80-62-6) is listed in group 3.

**Aspiration hazard**
Based on available data, the classification criteria are not met.

**Additional information on tests**
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

### 12. Ecological information

**Ecotoxicity**
The product is not: Ecotoxic.

**Persistence and degradability**
The product has not been tested.

**Bioaccumulative potential**
The product has not been tested.

**Mobility in soil**
The product has not been tested.

**Other adverse effects**
No information available.

**Further information**
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### 13. Disposal considerations

**Waste treatment methods**

**Disposal recommendations**
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

**Contaminated packaging**
Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### 14. Transport information

**Marine transport (IMDG)**

| UN number: | UN 1247 |
| UN proper shipping name: | METHYL METHACRYLATE MONOMER, STABILIZED |
| Transport hazard class(es): | 3 |
| Packing group: | II |
| Hazard label: | 3 |
### Special Provisions:
- **Limited quantity:** 1 L
- **Excepted quantity:** E2
- **EmS:** F-E, S-D

### Air transport (ICAO-TI/IATA-DGR)
- **UN number:** UN 1247
- **UN proper shipping name:** METHYL METHACRYLATE MONOMER, STABILIZED
- **Transport hazard class(es):** 3
- **Packing group:** II
- **Hazard label:** 3

**Special Provisions for User**
- **Special Provisions:** A209
- **Limited quantity Passenger:** 1 L
- **Passenger LQ:** Y341
- **Excepted quantity:** E2

### Environmental hazards
- **ENVIRONMENTALLY HAZARDOUS:** no

### Special precautions for user
- **Warning:** Combustible liquid.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- **not applicable**

### 15. Regulatory information

#### U.S. Regulations

**National regulatory information**
- **SARA Section 304 CERCLA:**
  - Methyl methacrylate (80-62-6): Reportable quantity = 1,000 (454) lbs. (kg)
  - Methyl methacrylate (80-62-6): Reportable quantity = 1,000 (454) lbs. (kg)
- **SARA Section 311/312 Hazards:**
  - ethylene dimethacrylate (97-90-5): Immediate (acute) health hazard
  - Methyl methacrylate (80-62-6): Fire hazard, Immediate (acute) health hazard
  - 7,7,9-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers) (72869-86-4): Immediate (acute) health hazard
  - Camphorquinone (10373-78-1): Immediate (acute) health hazard
  - 2-dimethylaminoethyl methacrylate (2867-47-2): Immediate (acute) health hazard
  - 2-hydroxyethyl methacrylate (868-77-9): Immediate (acute) health hazard
  - Methyl methacrylate (80-62-6): Fire hazard, Immediate (acute) health hazard
- **SARA Section 313 Toxic release inventory:**
  - Methyl methacrylate (80-62-6): De minimis limit = 1.0 %, Reportable threshold = Standard
  - Methyl methacrylate (80-62-6): De minimis limit = 1.0 %, Reportable threshold = Standard

**Clean Air Act Section 112(b):**

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**Revision No:** 2  
**USA - EN**  
**Print date:** 20.04.2020
The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.
(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)