1. Identification

Product identifier
VITA VM LC flow

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

Hazard categories:
- Skin corrosion/irritation: Skin Irrit. 2
- Serious eye damage/eye irritation: Eye Irrit. 2A
- Respiratory or skin sensitization: Skin Sens. 1

Hazard Statements:
- Causes skin irritation
- Causes serious eye irritation
- May cause an allergic skin reaction

Label elements
29 CFR Part 1910.1200

Signal word: Warning

Pictograms:

Hazard statements
- Causes skin irritation
- May cause an allergic skin reaction
- Causes serious eye irritation

Precautionary statements
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If on skin: Wash with plenty of water.
- If eye irritation persists: Get medical advice/attention.

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>109-16-0</td>
<td>triethylene glycol dimethacrylate</td>
<td>17.1605 %</td>
</tr>
<tr>
<td>94108-97-1</td>
<td>Ditrimethylolpropan Tetraacrylat</td>
<td>1.2215 %</td>
</tr>
<tr>
<td>2867-47-2</td>
<td>2-dimethylaminoethyl methacrylate</td>
<td>0.2253 %</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 polyethylene glycol, followed by plenty of water. 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*
Co-ordinate fire-fighting measures to the fire surroundings.

Specific hazards arising from the chemical
Non-flammable.

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

Additional information
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
Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions
Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up
Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.
7. Handling and storage

Precautions for safe handling

Advice on safe handling
No special measures are necessary.

Advice on protection against fire and explosion
No special fire protection measures are necessary.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed.

Advice on storage compatibility
No special measures are necessary.

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>7631-86-9</td>
<td>Silica, amorphous</td>
<td></td>
<td>6</td>
<td></td>
<td>TWA (8 h)</td>
<td>REL</td>
</tr>
</tbody>
</table>

Exposure controls

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 or drink.

Eye/face protection
Suitable eye protection: goggles.

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 Dermatril P NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 10 min

Skin protection
Wear suitable protective clothing.

Respiratory protection
Fresh air (open windows and doors) is necessary.
## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>viscous</td>
<td>not determined</td>
</tr>
<tr>
<td>Color</td>
<td>whitish</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>characteristic whitish</td>
<td></td>
</tr>
<tr>
<td>pH-Value</td>
<td>not determined</td>
<td></td>
</tr>
</tbody>
</table>

### Changes in the physical state

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>139 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>151 °C</td>
</tr>
</tbody>
</table>

### Flammability

- **Solid**: not determined
- **Gas**: not applicable

### Auto-ignition temperature

- **Solid**: not determined
- **Gas**: not applicable

### Decomposition temperature:

- not determined

### Oxidizing properties

- Not oxidizing.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor pressure</td>
<td>&lt;=1100 hPa</td>
</tr>
<tr>
<td>(at 50 °C)</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>not determined</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No</td>
</tr>
</tbody>
</table>

### Solubility in other solvents

- not determined

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
</tbody>
</table>

### Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid content</td>
<td>62.84 %</td>
</tr>
</tbody>
</table>

## 10. Stability and reactivity

### Reactivity

- No hazardous reaction when handled and stored according to provisions.

### Chemical stability

- The product is stable under storage at normal ambient temperatures.

### Possibility of hazardous reactions

- No known hazardous reactions.

### Conditions to avoid

- none
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>94108-97-1</td>
<td>Di trimethylolpropan Tetraacrylat</td>
<td>dermal</td>
<td>LD50</td>
<td>5170 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2867-47-2</td>
<td>2-dimethylaminoethyl methacrylate</td>
<td>oral</td>
<td>ATE</td>
<td>500 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>ATE</td>
<td>1100 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes skin irritation
Causes serious eye irritation

Sensitizing effects
May cause an allergic skin reaction (triethylene glycol dimethacrylate; 2-dimethylaminoethyl methacrylate)

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

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

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

Carcinogenicity (IARC):
Silica, amorphous (CAS 7631-86-9) is listed in group 3.

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

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

12. Ecological information

Ecotoxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.
13. Disposal considerations

Waste treatment methods
Advice on disposal
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
Handle contaminated packages in the same way as the substance itself.

14. Transport information

Marine transport (IMDG)
- UN number:
- UN proper shipping name: No dangerous good in sense of this transport regulation.
- Transport hazard class(es): No dangerous good in sense of this transport regulation.
- Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)
- UN number: No dangerous good in sense of this transport regulation.
- UN proper shipping name: No dangerous good in sense of this transport regulation.
- Transport hazard class(es): No dangerous good in sense of this transport regulation.
- Packing group: No dangerous good in sense of this transport regulation.

Environmental hazards
- ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user
No information available.

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 311/312 Hazards:
- triethylene glycol dimethacrylate (109-16-0): Immediate (acute) health hazard
- Ditrimethylolpropan Tetraacrylat (94108-97-1): Immediate (acute) health hazard
- 2-dimethylaminoethyl methacrylate (2867-47-2): Immediate (acute) health hazard

State Regulations
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
  This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Revision date: 29.03.2017
Revision No: 1

Abbreviations and acronyms
ADR: Accord européen sur le transport des marchandises dangereuses par Route
Safety Data Sheet

according to 29 CFR 1910.1200(g)

VITA VM LC flow

Revision date: 29.03.2017
Product code: 284-US

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 Harmonized 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
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Other data
The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary 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.)