1. Identification

Product identifier
VITA VM LC flow

Relevant identified uses of the substance or mixture and uses advised against

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 telephone number: +49-(0)761-19240

2. Hazard identification

Classification of the substance or mixture
WHMIS 2015
Respiratory or skin sensitization: Skin Sens. 1

Label elements
WHMIS 2015
Signal word: Warning

Pictograms:

Hazard statements
May cause an allergic skin reaction.

Precautionary statements
Avoid breathing dust/fume/gas/mist/vapours/spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of water.

Other hazards
No information available.

3. Composition/information on ingredients

Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<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>10 - &lt; 30% (*)</td>
</tr>
<tr>
<td>109-16-0</td>
<td>2,2’-ethylenedioxydiethyl dimethacrylate</td>
<td>10 - &lt; 30% (*)</td>
</tr>
<tr>
<td>94108-97-1</td>
<td>Ditrimethylolpropane Tetraacrylate</td>
<td>0.5 - &lt; 1.5% (*)</td>
</tr>
<tr>
<td>2867-47-2</td>
<td>2-dimethylaminoethyl methacrylate</td>
<td>0.1 - &lt; 1% (*)</td>
</tr>
</tbody>
</table>

(*) The actual concentration is withheld as a trade secret.

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**
Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

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

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

**Indication of 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 hazardous product**
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.

Hints on joint storage
No special measures are necessary.

8. Exposure controls/Personal protection

Control parameters

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

Skin protection
Use of protective clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Fresh air (open windows and doors) is necessary.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: viscous
Colour:
Odour: characteristic
pH-Value: not determined
Changes in the physical state

- **Melting point:** not determined
- **Initial boiling point and boiling range:** > 283 °C
- **Flash point:** 151 °C

Flammability

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

Explosive properties

- The product is not: Explosive.

Auto-ignition temperature

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

Decomposition temperature: not determined

Oxidizing properties

- Not oxidising.

Vapour pressure: <=1100 hPa

Density: not determined

Water solubility: No

Solubility in other solvents

- not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

Other information

- **Solid content:** 62.84 %

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.
Irritation and corrosivity
Based on available data, the classification criteria are not met.

Sensitizing effects
May cause an allergic skin reaction.
(7,7,9-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers); 2,2’-ethyleneoxydiethyl dimethacrylate; 2-dimethylaminoethyl methacrylate)

Carcinogenic/mutagenic/toxic effects for reproduction
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.

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
Harmful to aquatic life with long lasting effects.

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
Handle contaminated packages in the same way as the substance itself.

14. Transport information
Marine transport (IMDG)

<table>
<thead>
<tr>
<th>UN number:</th>
<th>No dangerous good in sense of this transport regulation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Nations proper shipping</td>
<td>No dangerous good in sense of this transport regulation.</td>
</tr>
<tr>
<td>name:</td>
<td></td>
</tr>
<tr>
<td>Transport hazard class(es):</td>
<td>No dangerous good in sense of this transport regulation.</td>
</tr>
<tr>
<td>Packing group:</td>
<td>No dangerous good in sense of this transport regulation.</td>
</tr>
</tbody>
</table>

Air transport (ICAO-TI/IATA-DGR)

<table>
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</table>

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

15. Regulatory information

Canadian regulations

16. Other information

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 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%
- CLP: Classification, labelling and Packaging
- REACH: Registration, Evaluation and Authorization of Chemicals
- GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
- UN: United Nations
- DNEL: Derived No Effect Level
- DMEL: Derived Minimal Effect Level
- PNEC: Predicted No Effect Concentration
- ATE: Acute toxicity estimate
- LL50: Lethal loading, 50%
- EL50: Effect loading, 50%
- EC50: Effective Concentration 50%
- ErC50: Effective Concentration 50%, growth rate
- NOEC: No Observed Effect Concentration
- BCF: Bio-concentration factor
- PBT: persistent, bioaccumulative, toxic
- vPvB: very persistent, very bioaccumulative
- RID: Regulations concerning the international carriage of dangerous goods by rail
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
  (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation  
  intérieures)
- EmS: Emergency Schedules
Further Information

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.)