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

1.1. Product identifier
VITA VM CC LIQUID

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture
Use as laboratory reagent

1.3. 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

1.4. Emergency telephone number:
+49-(0)761-19240

Further Information
medical device

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Regulation (EC) No. 1272/2008
Hazard categories:
Flammable liquid: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Highly flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.

2.2. Label elements
Regulation (EC) No. 1272/2008
Hazard components for labelling
methyl methacrylate
ethylene dimethacrylate
2-(2H-benzotriazol-2-yl)-p-cresol

Signal word: Danger

Pictograms:

Hazard statements
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
<th>EC No</th>
<th>Index No</th>
<th>REACH No</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate</td>
<td>75 - &lt; 80 %</td>
<td>201-297-1</td>
<td>607-035-00-6</td>
<td>01-2119452498-28</td>
</tr>
<tr>
<td>97-90-5</td>
<td>ethylene dimethacrylate</td>
<td>15 - &lt; 20 %</td>
<td>202-617-2</td>
<td>607-114-00-5</td>
<td>01-2119965172-38</td>
</tr>
<tr>
<td>99-97-8</td>
<td>N,N-dimethyl-p-toluidine</td>
<td>1 - &lt; 5 %</td>
<td>202-805-4</td>
<td>612-056-00-9</td>
<td></td>
</tr>
<tr>
<td>131-57-7</td>
<td>2-Hydroxy-4-methoxy benzophenone</td>
<td>&lt; 1 %</td>
<td>219-470-5</td>
<td></td>
<td>01-2119583811-34</td>
</tr>
<tr>
<td>2440-22-4</td>
<td>2-(2H-benzotriazol-2-yl)-p-cresol</td>
<td>&lt; 1 %</td>
<td>212-782-2</td>
<td>607-124-00-X</td>
<td></td>
</tr>
<tr>
<td>888-77-9</td>
<td>2-hydroxyethyl methacrylate</td>
<td>&lt; 1 %</td>
<td>212-782-2</td>
<td>607-124-00-X</td>
<td></td>
</tr>
</tbody>
</table>

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. 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 skin, wash immediately with...
plenty of water and soap.

**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.

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

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

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

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

**Unsuitable extinguishing media**
Water.

**5.2. Special hazards arising from the substance or mixture**
Highly flammable. Vapours can form explosive mixtures with air.

**5.3. Advice for firefighters**
Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**
Use water spray jet 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.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**
Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**
Do not allow uncontrolled discharge of product into the environment. Explosion risk.

**6.3. 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.

**6.4. Reference to other sections**
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

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

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

**7.2. 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 exhaustion 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.

7.3. Specific end use(s)
Use as laboratory reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Name of agent</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fib/cm³</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>TWA (8 h)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>STEL (15 min)</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/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. Wear eye/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 Camatril, Butoject Breakthrough time (maximum wearing time) NBR (Nitrile rubber) 10 min Butyl caoutchouc (butyl rubber) 60 min

Skin protection
Wear suitable protective clothing.

Respiratory protection
Provide adequate ventilation as well as local exhaustion at critical locations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: colourless
Odour: characteristic
pH-Value: not determined

Changes in the physical state
Melting point: not determined
Initial boiling point and boiling range: 93 °C
Flash point: <12 °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. %
Ignition temperature: 430 °C

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

Decomposition temperature: not determined

Oxidizing properties
Not oxidising.
Vapour pressure: <=1100 hPa
(at 50 °C)
Vapour pressure: 64 hPa
(at 50 °C)
Density: not determined
Water solubility: No

Solubility in other solvents
not determined
Partition coefficient: not determined
Vapour density: not determined
Evaporation rate: not determined

9.2 Other information
Solid content: 0,0 %

SECTION 10: Stability and reactivity

10.1 Reactivity
Highly flammable.

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

10.3 Possibility of hazardous reactions
No known hazardous reactions.

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

10.5 Incompatible materials
No information available.
10.6. Hazardous decomposition products
No known hazardous decomposition products.

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>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate</td>
<td>dermal</td>
<td>LD50 &gt; 5000 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>97-90-5</td>
<td>ethylene dimethacrylate</td>
<td>dermal</td>
<td>LD50       3300 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>99-97-8</td>
<td>N,N-dimethyl-p-toluidine</td>
<td>oral</td>
<td>ATE        100 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>ATE        300 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation vapor</td>
<td>ATE         3 mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation aerosol</td>
<td>ATE      0,5 mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2440-22-4</td>
<td>2-(2H-benzotriazol-2-yl)-p-cresol</td>
<td>dermal</td>
<td>LD50 &gt;2000 mg/kg</td>
<td>Ratte</td>
<td>Hersteller</td>
<td></td>
</tr>
<tr>
<td>868-77-9</td>
<td>2-hydroxyethyl methacrylate</td>
<td>oral</td>
<td>LD50       5050 mg/kg</td>
<td>Rat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate</td>
<td>dermal</td>
<td>LD50 &gt;5000 mg/kg</td>
<td></td>
<td></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.

Sensitising effects
May cause an allergic skin reaction. (methyl methacrylate; ethylene dimethacrylate; 2-(2H-benzotriazol-2-yl)-p-cresol; 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.

STOT-single exposure
May cause respiratory irritation. (methyl methacrylate; ethylene dimethacrylate)

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].
SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>868-77-9</td>
<td>2-hydroxyethyl methacrylate</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>227 mg/l</td>
<td>96 h</td>
<td>Pimephales promelas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>868-77-9</td>
<td>2-hydroxyethyl methacrylate</td>
<td>0.47</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. 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.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

Land transport (ADR/RID)

<table>
<thead>
<tr>
<th>14.1. UN number:</th>
<th>UN 1247</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2. UN proper shipping name:</td>
<td>METHYL METHACRYLATE MONOMER, STABILIZED</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es):</td>
<td>3</td>
</tr>
<tr>
<td>14.4. Packing group:</td>
<td>II</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>3</td>
</tr>
</tbody>
</table>

Classification code: F1
Special Provisions: 386
Limited quantity: 1 L
Safety Data Sheet

according to Regulation (EC) No 1907/2006

<table>
<thead>
<tr>
<th>VITA VM CC LIQUID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date: 30.07.2019</td>
</tr>
<tr>
<td>Product code: 027</td>
</tr>
<tr>
<td>Page 8 of 10</td>
</tr>
</tbody>
</table>

**Excepted quantity:** E2  
**Transport category:** 2  
**Hazard No:** 339  
**Tunnel restriction code:** D/E

**Inland waterways transport (ADN)**

14.1. **UN number:** UN 1247  
14.2. **UN proper shipping name:** METHYL METHACRYLATE MONOMER, STABILIZED  
14.3. **Transport hazard class(es):** 3  
14.4. **Packing group:** II  
**Hazard label:** 3

**Classification code:** F1  
**Special Provisions:** 386  
**Limited quantity:** 1 L  
**Excepted quantity:** E2

**Marine transport (IMDG)**

14.1. **UN number:** UN 1247  
14.2. **UN proper shipping name:** METHYL METHACRYLATE MONOMER, STABILIZED  
14.3. **Transport hazard class(es):** 3  
14.4. **Packing group:** II  
**Hazard label:** 3

**Special Provisions:** 386  
**Limited quantity:** 1 L  
**Excepted quantity:** E2  
**EmS:** F-E, S-D

**Air transport (ICAO-TI/IATA-DGR)**

14.1. **UN number:** UN 1247  
14.2. **UN proper shipping name:** METHYL METHACRYLATE MONOMER, STABILIZED  
14.3. **Transport hazard class(es):** 3  
14.4. **Packing group:** II  
**Hazard label:** 3

**Special Provisions:** A209  
**Limited quantity Passenger:** 1 L  
**Passenger LQ:** Y341  
**Excepted quantity:** E2  
**IATA-packing instructions - Passenger:** 353  
**IATA-max. quantity - Passenger:** 5 L  
**IATA-packing instructions - Cargo:** 364  
**IATA-max. quantity - Cargo:** 60 L

**14.5. Environmental hazards**
ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user
Warning: Combustible liquid.

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information
Restrictions on use (REACH, annex XVII):
Entry 3: 2-hydroxyethyl methacrylate
Information according to 2012/18/EU (SEVESO III):
P5c FLAMMABLE LIQUIDS

National regulatory information
Employment restrictions:
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):
2 - obviously hazardous to water
Skin resorption/Sensitization:
Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 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
**Classification for mixtures and used evaluation method according to regulation (EC) No. 1272/2008 [CLP]**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2; H225</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Skin Irrit. 2; H315</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Sens. 1; H317</td>
<td>Calculation method</td>
</tr>
<tr>
<td>STOT SE 3; H335</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

**Relevant H and EUH statements (number and full text)**

- **H225**: Highly flammable liquid and vapour.
- **H301**: Toxic if swallowed.
- **H311**: Toxic in contact with skin.
- **H315**: Causes skin irritation.
- **H317**: May cause an allergic skin reaction.
- **H319**: Causes serious eye irritation.
- **H331**: Toxic if inhaled.
- **H335**: May cause respiratory irritation.
- **H373**: May cause damage to organs through prolonged or repeated exposure.
- **H400**: Very toxic to aquatic life.
- **H411**: Toxic to aquatic life with long lasting effects.
- **H412**: Harmful to aquatic life with long lasting effects.
- **H413**: May cause long lasting harmful effects to aquatic life.

**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.)*