1. Identification

Product identifier
VITA VM LC OPAQUE LIQUID

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

Details of the supplier of the safety data sheet

2. Hazard identification

Classification of the substance or mixture

WHMIS 2015
Hazard categories:
- Flammable liquid: 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

Hazard Statements:
- Highly flammable liquid and vapour.
- Causes skin irritation.
- May cause an allergic skin reaction.
- May cause respiratory irritation.

Label elements

WHMIS 2015
Signal word: Danger

Pictograms:

Hazard statements
- Highly flammable liquid and vapour.
- Causes skin irritation.
- May cause an allergic skin reaction.
- May cause respiratory irritation.

Precautionary statements
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep container tightly closed.
- Store in a well-ventilated place.
- Keep container tightly closed.
- Wear protective gloves/protective clothing/eye protection/face protection.

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>97-90-5</td>
<td>ethylene dimethacrylate</td>
<td>55 - &lt; 60 %</td>
</tr>
<tr>
<td>80-62-6</td>
<td>methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate</td>
<td>20 - &lt; 25 %</td>
</tr>
<tr>
<td>2867-47-2</td>
<td>2-dimethylaminoethyl methacrylate</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td>10373-78-1</td>
<td>Camphorquinone</td>
<td>1 - &lt; 5 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

**Description of first aid measures**

**After inhalation**
- Provide fresh air. Medical treatment necessary.

**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.

**Indication of 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 hazardous product**
- Highly flammable. Vapours can 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 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.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
- Remove all sources of ignition. Do not breathe gas/fumes/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. Danger of explosion

**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.
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/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.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility
Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

8. Exposure controls/Personal protection

Control parameters

Exposure limits (ACGIH)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>ppm</th>
<th>mg/m³</th>
<th>F/ml</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>ACGIH-2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td></td>
<td></td>
<td>STEL (15 min)</td>
<td>ACGIH-2016</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/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 or drink.

Eye/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 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
Provide adequate ventilation as well as local exhaustion at critical locations. Technical ventilation of workplace.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>light yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

Test method

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH-Value</td>
<td>not determined</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</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>101 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>10 °C</td>
</tr>
</tbody>
</table>

Flammability

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower explosive limits:</td>
<td>2,1 vol. %</td>
</tr>
<tr>
<td>Upper explosive limits:</td>
<td>12,5 vol. %</td>
</tr>
</tbody>
</table>

Auto-ignition temperature

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour 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>Vapour 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>0,0 %</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Conditions to avoid
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can 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>Chemical name</th>
<th>Route of exposure</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 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80-62-6</td>
<td>methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate</td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;5000 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.
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 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; 2-dimethylaminoethyl methacrylate)

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

STOT-single exposure
May cause respiratory irritation. (ethylene dimethacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

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
This 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

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 1247
United Nations proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED
Transport hazard class(es): 3
Packing group: II
Hazard label: 3

Marine pollutant: Nein
EmS: F-E,S-D

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 1247
United Nations proper shipping name: Methyl methacrylate monomer, stabilized
Transport hazard class(es): 3
Packing group: II
Hazard label: 3

Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

15. Regulatory information

16. Other information
Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)