1. Identification

Product identifier
VITAVM LC SEPARATOR

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

Hazard categories:
Flammable liquid: Flam. Liq. 2
Aspiration hazard: Asp. Tox. 1
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Dam. 1
Specific target organ toxicity - single exposure: STOT SE 3
Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:
Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye damage.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

Label elements

WHMIS 2015

Signal word: Danger

Pictograms:

Hazard statements
Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye damage.
May cause drowsiness or dizziness.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Precautionary statements
Avoid release to the environment.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
Call a POISON CENTER/doctor if you feel unwell.

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>110-82-7</td>
<td>cyclohexane</td>
<td>50 - &lt; 55 %</td>
</tr>
<tr>
<td>108-88-3</td>
<td>toluene</td>
<td>10 - &lt; 15 %</td>
</tr>
<tr>
<td>4253-34-3</td>
<td>methylsilanetrey triacetat</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
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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. 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 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.

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

7. Handling and storage

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.

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.

Reference to other sections
Safe handling: see section 7
Personal protection equipment: 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/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 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.

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>110-82-7</td>
<td>Cyclohexane</td>
<td></td>
<td></td>
<td></td>
<td>TWA (8 h)</td>
<td>ACGIH-2016</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>20</td>
<td></td>
<td></td>
<td>TWA (8 h)</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**

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 Breakthrough time (maximum wearing time) 60 min NBR (Nitrile rubber)

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

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

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state: liquid</td>
<td></td>
</tr>
<tr>
<td>Colour: translucent</td>
<td></td>
</tr>
<tr>
<td>Odour: characteristic</td>
<td></td>
</tr>
</tbody>
</table>

**pH-Value:** not determined

**Changes in the physical state**

- **Melting point:** not determined
- **Initial boiling point and boiling range:** 77 °C
- **Flash point:** < 5 °C

**Flammability**

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

- **Lower explosive limits:** 1,2 vol. %
- **Upper explosive limits:** 8,3 vol. %

- **Ignition temperature:** 260 °C DIN 51794

**Auto-ignition temperature**

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

- **Decomposition temperature:** not determined

**Oxidizing properties**

- Not oxidizing.

- **Vapour pressure:** <=1100 hPa

- **Density:** 0,86700 g/cm³

- **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: 0.0 %

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>110-82-7</td>
<td>cyclohexane</td>
<td>dermal</td>
<td>LD50</td>
<td>12705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>108-88-3</td>
<td>toluene</td>
<td>dermal</td>
<td>LD50</td>
<td>12124</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4253-34-3</td>
<td>methylsilanetriyl triacetat</td>
<td>oral</td>
<td>ATE</td>
<td>500</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes skin irritation.
Causes serious eye damage.

Sensitizing effects
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Suspected of damaging fertility or the unborn child. (toluene)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.

STOT-single exposure
May cause drowsiness or dizziness. (cyclohexane)

STOT-repeated exposure
May cause damage to organs through prolonged or repeated exposure. (toluene)

Aspiration hazard
May be fatal if swallowed and enters airways. (cyclohexane; toluene)

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

**Ecotoxicity**
Very toxic 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.

**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**
This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

14. Transport information

**Marine transport (IMDG)**

- **UN number:** UN 1993
- **United Nations proper shipping name:** FLAMMABLE LIQUID, N.O.S. (cyclohexane)
- **Transport hazard class(es):** 3
- **Packing group:** II
- **Hazard label:** 3

**Limited quantity:** 1 L
**Exepted quantity:** E2
**EmS:** F-E, S-E

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

- **UN number:** UN 1993
- **United Nations proper shipping name:** FLAMMABLE LIQUID, N.O.S. (cyclohexane)
- **Transport hazard class(es):** 3
- **Packing group:** II
- **Hazard label:** 3
VITAVM LC SEPARATOR

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

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

Danger releasing substance: cyclohexane

15. Regulatory information

Canadian regulations

16. Other information

Further Information

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.)