# 1. Identification

**Product identifier**

VITACOLL

**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 Zahntechnik 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

## 2. Hazard(s) identification

### 29 CFR Part 1910.1200

**Hazard categories:**

- Flammable liquids: Flam. Liq. 2
- Skin corrosion/irritation: Skin Irrit. 2
- Serious eye damage/eye irritation: Eye Irrit. 2A
- Respiratory or skin sensitization: Skin Sens. 1
- Specific target organ toxicity single exposure: STOT SE 3
- Specific target organ toxicity single exposure: STOT SE 3

**Hazard Statements:**

- Highly flammable liquid and vapor
- Causes skin irritation
- Causes serious eye irritation
- May cause an allergic skin reaction
- May cause respiratory irritation
- May cause drowsiness or dizziness

## 3. Label elements

### 29 CFR Part 1910.1200

**Signal word:** Danger

**Pictograms:**

- ![Flammable Liquid](image)
- ![Caution](image)

**Hazard statements:**

- Highly flammable liquid and vapor
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- May cause drowsiness or dizziness

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Revision No: 1  
USA - EN  
Print date: 21.06.2017
Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid breathing dust/fume/gas/mist/vapors/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/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Keep cool.
Store in a well-ventilated place. Keep container tightly closed.

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>80-62-6</td>
<td>methyl 2-methylprop-2-enate; methyl 2-methylpropenoate; methyl methacrylate</td>
<td>49.9975 %</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone; ethyl methyl ketone</td>
<td>49.9975 %</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 plenty of water and soap. 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**
Carbon dioxide (CO2), Foam, Extinguishing powder.

**Unsuitable extinguishing media**
Water.

**Specific hazards arising from the chemical**
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.

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 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

<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>78-93-3</td>
<td>2-Butanone (Methyl ethyl ketone)</td>
<td>200</td>
<td>590</td>
<td></td>
<td>TWA (8 h)</td>
<td>PEL</td>
</tr>
<tr>
<td>78-93-3</td>
<td>2-Butanone</td>
<td>200</td>
<td>590</td>
<td></td>
<td>TWA (8 h)</td>
<td>REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>300</td>
<td>885</td>
<td></td>
<td>STEL (15 min)</td>
<td>REL</td>
</tr>
<tr>
<td>78-93-3</td>
<td>Methyl ethyl ketone</td>
<td>200</td>
<td></td>
<td></td>
<td>TWA (8 h)</td>
<td>ACGIH-2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>300</td>
<td></td>
<td></td>
<td>STEL (15 min)</td>
<td>ACGIH-2016</td>
</tr>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>100</td>
<td>410</td>
<td></td>
<td>TWA (8 h)</td>
<td>PEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>410</td>
<td></td>
<td>TWA (8 h)</td>
<td>REL</td>
</tr>
<tr>
<td></td>
<td></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>

Biological Exposure Indices (BEI-ACGIH)

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>Determinant</th>
<th>Value</th>
<th>Test material</th>
<th>Sampling time</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-93-3</td>
<td>METHYL ETHYL KETONE</td>
<td>Methyl ethyl ketone</td>
<td>2 mg/L</td>
<td>urine</td>
<td>End of shift</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 Butoject Butyl caoutchouc (butyl rubber) Breakthrough time (maximum wearing time) 60 min

Skin protection
Wear suitable protective clothing.

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>Color: colourless</td>
<td></td>
</tr>
<tr>
<td>Odor: characteristic</td>
<td></td>
</tr>
</tbody>
</table>

pH-Value: not determined

Changes in the physical state
Melting point/freezing point: not determined
Initial boiling point and boiling range: 79 °C
Flash point: < -5 °C

Flammability
Solid: not applicable
Gas: not applicable

Lower explosion limits: 1,8 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 oxidizing.

Vapor pressure: <=1100 hPa
(at 50 °C)
Density: 0,87200 g/cm³
Water solubility: No

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

Other information
Solid content: 0,0 %

10. Stability and reactivity

Reactivity
Highly flammable.

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

Possibility of hazardous reactions
No known hazardous reactions.
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>Components</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 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate</td>
<td>dermal</td>
<td>LD50 &gt;5000 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone; ethyl methyl ketone</td>
<td>dermal</td>
<td>LD50 5000 mg/kg</td>
<td></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 (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

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

Specific target organ toxicity (STOT) - single exposure
May cause respiratory irritation (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)
May cause drowsiness or dizziness (butanone; ethyl methyl ketone)

Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met.
Carcinogenicity (OSHA): No ingredient of this mixture is listed.
Carcinogenicity (IARC): Methyl methacrylate (CAS 80-62-6) is listed in group 3.
Carcinogenicity (NTP): No ingredient of this mixture is listed.

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
Avoid release to the environment.

13. Disposal considerations

Waste treatment methods

Advice on disposal
Do not allow to enter into surface water or drains. 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 1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; butanone; ethyl methyl ketone)
Transport hazard class(es): 3
Packing group: II
Hazard label: 3

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

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 1993
UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; butanone; ethyl methyl ketone)
Transport hazard class(es): 3
Packing group: II
Hazard label: 3

Limited quantity Passenger: 1 L
Passenger LQ: Y341
Excepted quantity: E2
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user
Warning: Combustible liquid.

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 304 CERCLA:
Methyl methacrylate (80-62-6): Reportable quantity = 1,000 (454) lbs. (kg)
Methyl ethyl ketone (78-93-3): Reportable quantity = 5,000 (2270) lbs. (kg)
SARA Section 311/312 Hazards:
Methyl methacrylate (80-62-6): Fire hazard, Immediate (acute) health hazard
Methyl ethyl ketone (78-93-3): Fire hazard, Immediate (acute) health hazard
SARA Section 313 Toxic release inventory:
Methyl methacrylate (80-62-6): De minimis limit = 1.0 %, Reportable threshold = Standard
Clean Air Act Section 112(b):
Methyl methacrylate (80-62-6), Methyl ethyl ketone (78-93-3)

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: 26.01.2017
Revision No: 1
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%

Other data
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.)