1. Identification

Product identifier
VITA VIONIC BOND II

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

Further Information
medical device

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200
- Flammable liquids: 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 (respiratory tract irritation)
- Specific target organ toxicity repeated or prolonged exposure: STOT RE 2

Label elements

29 CFR Part 1910.1200
- Signal word: Danger
- Pictograms:

Hazard statements
- Highly flammable liquid and vapor
- Causes skin irritation
- May cause an allergic skin reaction
- May cause respiratory irritation
- May cause damage to organs through prolonged or repeated exposure

Precautionary statements
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Do not breathe 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 inhaled: Remove person to fresh air and keep comfortable for breathing.

Hazards not otherwise classified
- No information available.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>methyl methacrylate</td>
<td>96.1 %</td>
</tr>
<tr>
<td>99-97-8</td>
<td>N,N-dimethyl-p-toluidine</td>
<td>3.8 %</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. Vapors may 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/stream 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/fume/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.
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 (PPE): 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/fume/vapour/spray.

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may 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.

Hints on joint storage
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>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>
</tbody>
</table>

Exposure controls

Appropriate engineering controls
If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/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 protection/face protection.

Hand protection
Recommended glove articles KCL Butoject Butyl caoutchouc (butyl rubber) Breakthrough time (maximum wearing time) 60 min 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.

**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

### 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>Color</td>
<td>colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>stinging</td>
</tr>
<tr>
<td>pH-Value</td>
<td>not determined</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing 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>
<tr>
<td>Flammability</td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
<tr>
<td>Lower explosion limits</td>
<td>2,1 vol. %</td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td>12,5 vol. %</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>430 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>not determined</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td></td>
</tr>
<tr>
<td>Not oxidising</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt;=1100 hPa</td>
</tr>
<tr>
<td>Density</td>
<td>0,94000 g/cm³</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>not determined</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td>Other information</td>
<td></td>
</tr>
<tr>
<td>Solid content</td>
<td>0,0 %</td>
</tr>
</tbody>
</table>

## 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. Vapors may 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 methacrylate</td>
<td>dermal</td>
<td>LD50 &gt; 5000 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 vapour</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>
</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 (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 methacrylate)

**Specific target organ toxicity (STOT) - repeated exposure**

May cause damage to organs through prolonged or repeated exposure (N,N-dimethyl-p-toluidine)

<table>
<thead>
<tr>
<th>Carcinogenicity (OSHA):</th>
<th>No ingredient of this mixture is listed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity (IARC):</td>
<td>Methyl methacrylate (CAS 80-62-6) is listed in group 3. N,N-Dimethyl-p-toluidine (CAS 99-97-8) is listed in group 2B.</td>
</tr>
<tr>
<td>Carcinogenicity (NTP):</td>
<td>No ingredient of this mixture is listed.</td>
</tr>
</tbody>
</table>

**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
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

Disposal recommendations
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 1992
UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; N,N-dimethyl-p-toluidine)

Transport hazard class(es): 3
Packing group: II
Hazard label: 3+6.1

Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 1992
UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; N,N-dimethyl-p-toluidine)

Transport hazard class(es): 3
Packing group: II
Hazard label: 3+6.1
Special Provisions: A3

Limited quantity Passenger: 1 L
Passenger LQ: Y341
Excepted quantity: E2

IATA-packing instructions - Passenger: 352
IATA-max. quantity - Passenger: 1 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user
Warning: Combustible liquid. Toxic.

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)
SARA Section 311/312 Hazards:
Methyl methacrylate (80-62-6): Fire hazard, Immediate (acute) health hazard
N,N-dimethyl-p-toluidine (99-97-8): Immediate (acute) health hazard, Delayed (chronic) 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)

State Regulations
Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
WARNING: This product can expose you to chemicals including N,N-Dimethyl-p-toluidine (cancer), which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

16. Other information

Revision date: 14.08.2019
Revision No: 2

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.)