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

Hazard categories:
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
Specific target organ toxicity repeated or prolonged exposure: STOT RE 2

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

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:
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

Hazard statements

Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep cool.
Do not breathe dust/fume/gas/mist/vapors/spray. 
Wear protective gloves/protective clothing/eye protection/face protection.

Hazard 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-enoate; methyl 2-methylpropenoate; methyl methacrylate</td>
<td>96.2 %</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. 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>80-62-6</td>
<td>Methyl methacrylate</td>
<td>100</td>
<td>410</td>
<td>TWA (8 h)</td>
<td>PEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>410</td>
<td>TWA (8 h)</td>
<td>REL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>50</td>
<td></td>
<td>TWA (8 h)</td>
<td>ACGIH-2016</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td></td>
<td>STEL (15 min)</td>
<td>ACGIH-2016</td>
<td></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**
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>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td>not determined</td>
</tr>
<tr>
<td>Color</td>
<td>colourless</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>stinging</td>
<td></td>
</tr>
<tr>
<td>pH-Value</td>
<td>not determined</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/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>
</tbody>
</table>

#### Flammability

<table>
<thead>
<tr>
<th>Type</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 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>
</tbody>
</table>

#### Auto-ignition temperature

<table>
<thead>
<tr>
<th>Type</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>Decomposition temperature</td>
<td>not determined</td>
</tr>
</tbody>
</table>

#### Oxidizing properties

Not oxidizing.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor pressure (at 50 °C)</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>
</tbody>
</table>

#### Solubility in other solvents

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility in other solvents</td>
<td>not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient</td>
<td>not determined</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. 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 mg/kg</td>
<td>&gt;5000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99-97-8</td>
<td>N,N-dimethyl-p-toluidine</td>
<td>oral</td>
<td>ATE mg/kg</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50 mg/kg</td>
<td>1650</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative vapour</td>
<td>ATE mg/l</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative aerosol</td>
<td>ATE mg/l</td>
<td>0,5</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 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)

Specific target organ toxicity (STOT) - repeated exposure
May cause damage to organs through prolonged or repeated exposure

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 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
Limited quantity: 1 L
## Safety Data Sheet

### VITA VIONIC BOND II

#### Product code: 289-US

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<table>
<thead>
<tr>
<th>Excepted quantity:</th>
<th>E2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EmS:</td>
<td>F-E, S-D</td>
</tr>
</tbody>
</table>

### 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

- **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 contains the following chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm: N,N-Dimethyl-p-toluidine (cancer).

### 16. Other information

- **Revision date:** 19.01.2017
- **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.)