

# SAFETY DATA SHEET

## VERTEX TRAYPLAST LIQUID

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product name** : VERTEX TRAYPLAST LIQUID  
**Supplier** : VERTEX-DENTAL B.V.  
 P.O. Box 10  
 3700 AA Zeist  
 The Netherlands  
 Tel.: +31 30 69 76 740  
 Telefax: +31 30 69 55 188  
**Emergency telephone number** : + 31 30 69 76 740

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/preparation** : Preparation

**Information on hazardous ingredients** \*

Chemical name	CAS No.	%	EC Number	Symbol	R-Phrases
Methyl methacrylate	80-62-6	> 80	201-297-1	F, Xi	R11-36/37/38-43
Ethyl methacrylate	97-63-2	<20	202-597-5	F, Xi	R11-36/37/38-43
Accelerator	99-97-8	< 1	202-805-4	T	R23/24/25-33-52/5-3

\* *Occupational Exposure Limit(s), if available, are listed in section 8*

### 3. HAZARDS IDENTIFICATION

**Physical/chemical hazards** : Highly incendive.  
**Human health hazards** : Irritating. May cause sensitization by skin contact.  
**Environmental hazards** : The data available do not support any environmental hazard.

### 4. FIRST-AID MEASURES

**Effects and symptoms**

**Inhalation** : Irritating to respiratory system. Exposure may result in depressed respiration, coughing, nausea and sore throat. Prolonged or repeated exposure to large amounts may cause damage to lungs (lung oedema).  
**Ingestion** : Irritating to mouth, throat and oesophagus. Exposure may result in sore throat, nausea, retching and blisters. Prolonged or repeated exposure to large amounts may result in unconsciousness or coma.  
**Skin contact** : Irritating to skin. Exposure may result in redness, swelling and pain. Prolonged or repeated skin contact may result in burns and blisters. May cause sensitization by skin contact (sweating, fever, pain). In oversensitive people even exposure to very small amounts causes allergic reactions.  
**Eye contact** : Irritating to eyes. Exposure may result in impaired vision, tears, redness and pain.

**First-aid measures**

**Inhalation** : Immediately remove victim to fresh air. Keep victim at rest in half upright position. If breathing is difficult: mouth-to-mouth resuscitation. If not breathing: artificial respiration. Immediately get medical attention.

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<b>Ingestion</b>	: Never give anything by mouth to an unconscious person. Do not induce vomiting. Wash out mouth with water. Make victim drink water. Keep victim at rest. Immediately get medical attention.
<b>Skin contact</b>	: Wash off with plenty of water for at least 15 minutes. Remove contaminated clothing. (Do not pull loose). Wash off with plenty of water. Immediately get medical attention.
<b>Eye contact</b>	: Immediately wash out with plenty of water with the eyelid held wide open for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. Immediately get medical attention.
<b>Protection of first-aiders</b>	: Avoid exposure. Use appropriate protection (see section 8).

#### 5. FIRE-FIGHTING MEASURES

##### Extinguishing media

<b>Suitable</b>	: Dry chemical, AFFF, foam, carbon dioxide. In extreme cases, if aforementioned extinguishing agents are ineffective in fighting a large fire, use a halon extinguisher.
<b>Not suitable</b>	: Do not extinguish with water.
<b>Special fire-fighting procedures</b>	: Fight fires from a protected location. Dike fire control water for later disposal. Cool exposed containers with water spray.
<b>Unusual fire/explosion hazards</b>	: Vapour is heavier than air and travels along the ground with the risk of distant ignition.
<b>Hazardous thermal (de)composition products</b>	: Burning may produce: carbon dioxide, carbon monoxide.
<b>Protection of fire-fighters</b>	: Burning may produce: toxic and/or corrosive vapours/gases. Use breathing apparatus (self-contained breathing apparatus with full face shield). Wear suitable protective clothing.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	: In the event of major spillage: Evacuate room. Contact safety officer immediately. Wear suitable protective clothing, gloves and eye/face protection.
<b>Environmental precautions</b>	: Prevent dispersion. Do not allow to enter sewage system. In the event of major spillage: Contact safety officer immediately.
<b>Methods for cleaning up</b>	: Incendive / Danger of explosion. Keep away from sources of ignition. Seal leak if possible without risk. Prevent dispersion. Clean up only under supervision of an expert. Collect spilled material in sealable containers. Absorb remainder in sand or other inert material. Collect in sealable containers.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	: When handling the product, allow for materials and conditions which should be avoided (see Chapter 10). Avoid exposure. Use appropriate protection (see section 8). Take precautionary measures against static discharges. Keep away from open flame, sparks or sources of ignition. Explosion protected electrical equipment.
<b>Storage</b>	: Store in fireproof location. When storing the product, allow for materials and conditions which should be avoided (see Chapter 10). Ventilation required along the floor. Keep container tightly closed.
<b><u>Packaging materials</u></b>	
<b>Suitable</b>	: Keep in sealable containers.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering measures** : In the event of use above flash point: Use in closed systems. Do not use compressed air by filling, discharging or handling the product. Ventilation required along the floor. Ventilation required. Explosion protected electrical equipment. Explosion proof lighting. Earth connection against static electricity. Spark-free tool. Do not heat.

**Hygiene measures** : When using do not eat, drink or smoke. Follow good housekeeping practices.

#### Occupational Exposure Limits

**Chemical name** : **OEL (United Kingdom)**  
Methyl methacrylate : TWA: 100 mg/m<sup>3</sup> (25 ppm)

#### Personal protective equipment

**Respiratory system** : With sufficient ventilation, extraction or closed system, breathing apparatus not necessary. In the event of possible exposure: gas/vapour filter.

**Skin and body** : Wear suitable protective clothing.

**Hands** : Wear suitable gloves (butyl rubber gloves or neoprene gloves).

**Eyes** : With sufficient extraction or closed system: safety goggles. In the event of possible exposure: combined eye and respiratory protection.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state** : Liquid.  
**Colour** : Colourless.  
**Odour** : Ester-like.  
**Boiling point** : 100,3 - 119 °C  
**Melting point** : -75 - -48 °C  
**Vapour pressure** : 47 mbar (20°C)  
**Specific gravity (H<sub>2</sub>O=1)** : 0,94  
**Solubility in water** : 15,9 g/l (20°C)  
**pH** : Not applicable.  
**Flash point** : 10 °C  
**Autoignition temperature** : 430 °C  
**Lower explosion limit** : 2,1 volume %  
**Upper explosion limit** : 12,5 volume %  
**Viscosity** : 0,6 mPa.s

#### 10. STABILITY AND REACTIVITY

**Stability** : Stable under normal conditions. When incorrectly used: Fire hazard, polymerization. (Stable with: hydrochinon).

**Conditions to avoid** : Keep away from: open flame and sources of ignition. Do not heat. Protect from (sun)light and heat.

**Materials to avoid** : Keep away from: oxidizing substances.

**Hazardous reactions** : Not available.

**Hazardous decomposition products** : None.

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#### 11. TOXICOLOGICAL INFORMATION

No toxicological information is available on the product, but some is available on the ingredients defined in section 2.

<b>Chemical name</b>	: <b>Methyl methacrylate</b>
<b>Acute toxicity - Oral</b>	: LD <sub>50</sub> (rat): 7872 mg/kg
<b>Acute toxicity - Dermal</b>	: LD <sub>50</sub> (rabbit): > 5000 mg/kg
<b>Acute toxicity - Inhalation</b>	: LC <sub>50</sub> (rat, 4 hour): 78000 mg/m <sup>3</sup>
<b>Chemical name</b>	: <b>Ethyl methacrylate</b>
<b>Acute toxicity - Oral</b>	: LD <sub>50</sub> (rat): 14800 mg/kg
<b>Acute toxicity - Inhalation</b>	: LC <sub>50</sub> (rat, 4 hour): 8300 ppm
<b>Chemical name</b>	: <b>Accelerator</b>
<b>Acute toxicity - Oral</b>	: LD <sub>50</sub> (rat): 1769 mg/kg
<b>Acute toxicity - Inhalation</b>	: LD <sub>50</sub> (mouse): 212 mg/kg
<b>Skin irritation</b>	: Mildly irritating.
<b>Eye irritation</b>	: Mildly irritating.

#### 12. ECOLOGICAL INFORMATION

No ecological information is known on the product but some is available on the ingredients defined in section 2.

<b>Chemical name</b>	: <b>Methyl methacrylate</b>
<b>Ecotoxicity</b>	: LC <sub>50</sub> (fish, 96 hour): 130 mg/l EC <sub>50</sub> (Daphnia magna, 24 hour): 720 mg/l
<b>Chemical name</b>	: <b>Accelerator</b>
<b>Ecotoxicity</b>	: LC <sub>50</sub> (fish, 96 hour): 46 mg/l

#### 13. DISPOSAL CONSIDERATIONS

<b>Methods of disposal</b>	: Disposal according to the local legislation.
<b>Waste of residues</b>	: Keep waste separate. Because of possible pollution, remove as industrial waste or hazardous waste.
<b>Contaminated packaging</b>	: Keep waste packaging separate. Because of possible pollution, remove as industrial waste or hazardous waste.

#### 14. TRANSPORT INFORMATION

##### International transport regulations

**UN number** : 1247  
**TREMCARD** : 30G30

##### Land - Road/Railway

**Proper shipping name** : Methylmethacrylate, stabilized  
**ADR/RID Class** : 3  
**ADR/RID Item number** : 3b)  
**Packing group** : II  
**Hazard Identification Number** : 339

##### Inland waterways

**Proper shipping name** : Methylmethacrylate, stabilized  
**ADNR Class** : 3

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**Sea**

**Proper shipping name** : Methylmethacrylate, stabilized  
**IMDG Class** : 3.2  
**IMDG Page number** : 3259  
**Packing group** : II  
**Medical First Aid Guide (MFAG)** : 330  
**Emergency Schedules (EmS)** : 3-07

**Air**

**Proper shipping name** : Methylmethacrylate, stabilized  
**UN/ID Number** : 1247  
**IATA-DGR Class** : 3

**National transport regulations**

**United Kingdom** : No additional national transport regulations are known to the supplier

## 15. REGULATORY INFORMATION

**EU Regulations**

**EU Classification (67/548/EEC-88/379/EEC)**

**Hazard symbol(s)** : F, Xi



HIGHLY FLAMMABLE



IRRITANT

**Risk phrases** : R11: Highly flammable.  
 R36/37/38: Irritating to eyes, respiratory system and skin.  
 R43: May cause sensitization by skin contact.

**Safety phrases** : S09: Keep container in a well-ventilated place.  
 S16: Keep away from sources of ignition - No smoking.  
 S24: Avoid contact with skin.  
 S29: Do not empty into drains.  
 S33: Take precautionary measures against static discharges.  
 S37: Wear suitable gloves.  
 S46: If swallowed, seek medical advice immediately and show this container or label.

**National regulations**

**United Kingdom** : No additional national regulations are known to the supplier

## 16. OTHER INFORMATION

The information contained in the Safety data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

**SAFETY DATA SHEET**  
**VERTEX TRAYPLAST LIQUID**

**HISTORY**

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