

# Material Safety Data Sheet

## Epoxy.com Product #692

Reviewed on 01/13/2010

- **1 Identification of substance:**

- **Product details:**

- **Trade name:** Epoxy.com Product #692
- **Application of the substance / the preparation** Coating

- **Manufacturer:**

Epoxy.com  
A Division of Epoxy Systems, Inc.  
20774 W. Pennsylvania Ave.  
Dunnellon, Fl 34431

Tel.: 352-489-1666

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- **Information department:** Norman L. Lambert, Jr.
- **Emergency information:** 800-633-8253

- **2 Composition/Data on components:**

- **Chemical characterization**
- **Description:** methyl methacrylate resin

**Dangerous components:**

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80-62-6 methyl methacrylate  
25-50 %

Xi, F; R 11-37/38-43

EINECS: 201-297-1

103-11-7 2-ethylhexyl acrylate  
25-50 %

Xi; R 37/38-43

EINECS: 203-080-7

- **Additional information**

For the wording of the listed risk phrases refer to section 16.

- **3 Hazards identification**

- **Hazard description:**

Xi Irritant

F Highly flammable

- **Information pertaining to particular dangers for man and environment**

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 11 Highly flammable.

R 37/38 Irritating to respiratory system and skin.

R 43 May cause sensitization by skin contact.

- **Classification system**

- **NEPA ratings (scale 0-4)**

Health = 1

Fire = 3

Reactivity = 0

- **4 First aid measures**

- **General information**

Immediately remove any clothing soiled by the product. Take affected persons out into the fresh air.

- **After inhalation**

Take affected persons into fresh air and keep quiet. Seek medical treatment in case of complaints.

- **After skin contact**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- **After eye contact**

Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing** Seek immediate medical advice.

- **Information for doctor**

No particular measures are known - treat according to symptoms.

- **The following symptoms may occur:** Headache

- **5 Fire fighting measures**

- **Suitable extinguishing agents**  
CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents**  
Water with full jet.
- **Special hazards caused by the material, its products of combustion or resulting gases:**  
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

- **6 Accidental release measures**

- **Person-related safety precautions:**  
Ensure adequate ventilation  
Keep away from ignition sources  
Wear protective clothing.
- **Measures for environmental protection:**  
Do not allow product to reach sewage system or any water course.  
Do not allow to penetrate the ground/soil.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents  
Collect in a suitable container and dispose of as described at paragraph 13.
- **Additional information:** Clean the accident area carefully.

- **7 Handling and storage**

- **Handling**

- **Information for safe handling:**  
 Keep receptacles tightly sealed.  
 Store in cool, dry place in tightly closed receptacles.  
 Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about protection against explosions and fires:**  
 Keep ignition sources away - Do not smoke.  
 Protect against electrostatic charges.  
 Fumes can combine with air to form an explosive mixture.  
 Flammable gas-air mixtures may be formed in empty receptacles.
- **Storage**
- **Requirements to be met by storerooms and receptacles:**  
 Store in a cool location.  
 Keep containers securely closed and dry, store at 5 - 25°C.  
 Store only in the original receptacle.  
 Provide floor trough without outlet.
- **Information about storage in one common storage facility:**  
 Store away from oxidizing agents.
- **Further information about storage conditions:**  
 Keep receptacle tightly sealed.  
 Store in cool, dry conditions in well sealed receptacles.  
 Store only outside or in explosion proof rooms.

• **8 Exposure controls and personal protection**

- **Additional information about design of technical systems:**  
 No further data; see item 7.

**Components with limit values that require monitoring at the workplace:**

80-62-6 methyl methacrylate (25-50%)  
 PEL: 410 mg/m<sup>3</sup>, 100 ppm  
 REL: 410 mg/m<sup>3</sup>, 100 ppm  
 TLV: Short-term value: 410 mg/m<sup>3</sup>, 100 ppm  
 Long-term value: 205 mg/m<sup>3</sup>, 50 ppm  
 SEN

- **Additional information:**  
The lists that were valid during the creation were used as basis.
  
- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.  
Immediately remove all soiled and contaminated clothing  
Store protective clothing separately.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Recommended filter device for short term use:**  
Combination filter A-P2
- **Protection of hands:**  
Only use chemical-protective gloves with CE-labeling of category III.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
Nitrile rubber, NBR  
Butyl rubber, BR  
Recommended thickness of the material:  $\geq 0.5$  mm  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.  
As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Not suitable are gloves made of the following materials:**  
Leather gloves  
Strong gloves

- **Eye protection:** Goggles recommended during refilling.
- **Body protection:** Protective work clothing.

• **9 Physical and chemical properties:**

- **General Information**

- **Form:** Fluid
- **Color:**  
Whitish  
Transparent
- **Odor:** Ester-like

<u>Method</u>	<u>Value/Range</u>	<u>Unit</u>
• <b>Change in condition</b>		
• <b>Melting point/Melting range:</b>	undetermined	
• <b>Boiling point/Boiling range:</b>		101°C
• <b>Flash point:</b> DIN 53213		10°C
• <b>Ignition temperature:</b>		245°C
• <b>Auto igniting:</b>	Product is not self-igniting.	
• <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
• <b>Explosion limits:</b>		
• <b>Lower:</b>	0.8 Vol %	
• <b>Upper:</b>	12.5 Vol %	
• <b>Vapor pressure:</b>	at 25°C	47 hPa
• <b>Density:</b> DIN 51757	at 25°C	0.99 g/cm <sup>3</sup>
• <b>Solubility in / Miscibility with</b>		
• <b>Water:</b>	at 20°C max 16 g/l	
• <b>Organic solvents:</b>	Soluble in many organic solvents	

• **10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

- **Materials to be avoided:**  
acids  
strong oxidizing agents
- **Dangerous reactions**  
Violent reactions with strong alkalis and oxidizing agents  
Reacts with amines
- **Dangerous products of decomposition:**  
in the event of fire:  
toxic gases and vapors  
Flammable gases/vapors

- **11 Toxicological information**

- **Acute toxicity:**  
**LD/LC50 values that are relevant for classification:**

80-62-6 methyl methacrylate  
Oral: LD50: > 5000 mg/kg (rat)  
Dermal: LD50: > 5000 mg/kg (rab)  
Inhalative: LC50/4 h: 7093 mg/l (rat)  
103-11-7 2-ethylhexyl acrylate  
Oral: LD50: 4435 mg/kg (rat)  
Dermal: LD50: > 5000 mg/kg (rab)  
Inhalative: LC50/4 h: 600 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

- **12 Ecological information:**

- **Ecotoxicological effects:** Not determined  
**Acquatic toxicity:**

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80-62-6 methyl methacrylate

BSB5-Wert: 0.14 g/g (-)

EC0: 100 mg/l (Pseudomonas putida)

EC3: (192h) 37 mg/l (Scenedesmus quadricauda)

EC50: (96h) 170 mg/l (Selenastrum capricornutum)

EC50: (48h) 69 mg/l (daphnia)

LC50: 350 mg/l (Leuciscus idus)

LC50 (96h): >79 mg/l (Onchorhynchus mykiss)

LC50 (96h): 232 mg/l (Lepomis macrochirus (bluegill))

LC50 (96h): 277 mg/l (Goldfish)

103-11-7 2-ethylhexyl acrylate

EC0: (192h) 0.06 mg/l (Microcystis aeruginosa)

EC50: (48h) 17.5 mg/l (daphnia)

EC50: (0.5h) > 1000 mg/l (Pseudomonas putida)

EC50 (72h): 44 mg/l (Scenedesmus subspicatus)

LC50: (48h) 23 mg/l (Leuciscus idus)

- **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **13 Disposal considerations**

- **Product:**

- **Recommendation**

Must be specially treated adhering to official regulations.

- **Uncleaned packagings:**

- **Recommendation:**

Disposal must be made according to official regulations.

- **14 Transport information**

- **DOT regulations:**

- **Hazard class:** 3

- **Identification number:** UN1866

- **Packing group:** II

- **Proper shipping name (technical name):**

RESIN SOLUTION

- **Label** 3
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** 3 (F1) Flammable liquids
- **Danger code (Kemler):** 33
- **UN-Number:** 1866
- **Packaging group:** II
- **Description of goods:** 1866 RESIN SOLUTION
- **Maritime transport IMDG:**
- **IMDG Class:** 3
- **UN Number:** 1866
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E, S-E
- **Marine pollutant:** No
- **Proper shipping name:** RESIN SOLUTION
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1866
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** RESIN SOLUTION

- **\*15 Regulations**

- **Cancerogenity categories**

- **EPA (Environmental Protection Agency)**

80-62-6 methyl methacrylate: E;NL

- **IARC (International Agency for Research on Cancer)**

80-62-6 methyl methacrylate: 3

103-11-7 2-ethylhexyl acrylate: 3

128-37-0 2,6-di-tert-butyl-p-cresol: 3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

80-62-6 methyl methacrylate: A4

128-37-0 2,6-di-tert-butyl-p-cresol: A4

**MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

• **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

• **Code letter and hazard designation of product:**

Xi Irritant F Highly flammable

• **Hazard-determining components of labeling:**

methyl methacrylate  
2-ethylhexyl acrylate

• **Risk phrases:**

11 Highly flammable.  
37/38 Irritating to respiratory system and skin.  
43 May cause sensitization by skin contact.

• **Safety phrases:**

9 Keep container in a well-ventilated place.  
16 Keep away from sources of ignition - No smoking.  
24 Avoid contact with skin.  
33 Take precautionary measures against static discharges.  
37 Wear suitable gloves.  
60 This material and its container must be disposed of as hazardous waste.

• **National regulations**

• **Technical instructions (air):**

• **VOC USA** % 0.1 g/l / 0.00 lb/gl

• **Water hazard class:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

• **Sara**

**Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 (Specific toxic chemical listings):**

80-62-6 methyl methacrylate

**TSCA (Toxic Substances Control Act):**

80-62-6 methyl methacrylate

103-11-7 2-ethylhexyl acrylate

103-83-3 benzyldimethylamine

3077-12-1 2,2'-[(4-methylphenyl)imino]bisethanol

2082-81-7 1,4-Butandiol dimethacrylate

**Chemicals known to cause cancer:**

None of the ingredients is listed.

• **16 Other information:**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Changes made since last issue dated 16.11.2007 at the following points: \*

• **Relevant R-phrases**

11 Highly flammable.

37/38 Irritating to respiratory system and skin.

43 May cause sensitization by skin contact.

• **\* Data compared to the previous version altered.**