

Material Safety Data Sheet

Epoxy.com Product #691

Reviewed on 01/12/2010

- **1 Identification of substance:**

- **Product details:**

- **Trade name:** Epoxy.com Product #691
- **Application of the substance /** the preparation Coating

- **Manufacturer:**

Epoxy.com
A Division of Epoxy Systems, Inc.
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Dunnellon, Fl 34431

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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:**

80-62-6 methyl methacrylate

50-100 %

Xi, F; R 11-37/38-43
EINECS: 201-297-1
23077-12-1 2,2'-[(4-methylphenyl)imino]bisethanol
< 2.5 %
Xn, Xi; R 22-36/38
EINECS: 221-359-1

- **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**

- **NFPA 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**

CO₂, 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 (50-100%)

PEL: 410 mg/m³, 100 ppm

REL: 410 mg/m³, 100 ppm

TLV: Short-term value: 410 mg/m³, 100 ppm

Long-term value: 205 mg/m³, 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.

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**

Butyl rubber, BR

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 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 through 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:

Strong gloves
Leather gloves

- **Eye protection:** Tightly sealed goggles.
- **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>
• Change in condition		
• Melting point/Melting range:	undetermined	
• Boiling point/Boiling range:		100 °C
• Flash point: DIN 53213		8 °C
• Ignition temperature:		245 °C
• Auto igniting:	Product is not self-igniting.	
• Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.		
• Explosion limits:		
• Lower:	0.8 Vol %	
• Upper:	12.5 Vol %	
• Vapor pressure:	at 25 °C	47 hPa
• Density: DIN 51757	at 25 °C	0.99 g/cm ³
• Solubility in / Miscibility with		
• Water:	at 20 °C max	16 g/l
• Organic solvents:	Soluble in many organic solvents	
• Viscosity:		

- **dynamic:** at 23°C 90 - 150 mPas
Brookfield
- **kinematic:** at 23°C 27 - 33 s
DIN 53211/4

- **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)

23077-12-1 2,2'-[(4-methylphenyl)imino]bisethanol

Oral: LD50: 300 mg/kg (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

- **Aquatic toxicity:**

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)

- **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
- **Propper shipping name:** RESIN SOLUTION

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1866
- **Label** 3
- **Packaging group:** II
- **Propper 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

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
- **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.
28 After contact with skin, wash immediately with plenty of soap and water
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 (Exremely hazardous substances):

None of the ingredients is listed.
Section 313 (Specific toxic chemical listings):

80-62-6 methyl methacrylate

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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 20.07.2006 at the following points: *

- **Relevant R-phrases**

11 Highly flammable.

22 Harmful if swallowed.

36/38 Irritating to eyes and skin.

37/38 Irritating to respiratory system and skin.

43 May cause sensitization by skin contact.