1 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name: **Epoxy.com Product #690 WET Area Sealer**
- Application of the substance / the preparation: Coating
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  Epoxy Systems, Inc.
  20774 W Pennsylvania Ave
  Dunnellon, FL 34431
  Tel.: +1 352 489 1666
  Fax.: +1 352 489 1666
- Information department:
  352 489 1666
  email: info@epoxy.com
- Emergency telephone number: PERS 1 800 633 8253

2 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: methyl methacrylate resin

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Description</th>
<th>Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>201-297-1</td>
<td>methyl methacrylate</td>
<td>50-100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Xi R37/38-43; F R11; H225; H315; H317; H335</td>
</tr>
<tr>
<td>103-11-7</td>
<td>203-080-7</td>
<td>2-ethylhexyl acrylate</td>
<td>10-25%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Xi R37/38-43; H315; H317; H335</td>
</tr>
<tr>
<td>38668-48-3</td>
<td>254-075-1</td>
<td>1,1’-(p-tolylimino)dipropan-2-ol</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>T R25; Xi R41; R52/53; H301; H318; H402; H412</td>
</tr>
<tr>
<td>2440-22-4</td>
<td>219-470-5</td>
<td>2-(2H-Benzotriazol-2-yl)-p-kresol</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Xi R43; R53; H317; H413</td>
</tr>
<tr>
<td>123-81-9</td>
<td>204-653-4</td>
<td>ethylene di(S-thioacetate)</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Xn R20/21/22; Xi R36; N R51/53; H331; H411; H302; H312; H319; H401</td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- Classification of the substance or mixture
  - **GHS02 Flame**
    - H225: Highly flammable liquid and vapour.
- **GHS07**
  - H315: Causes skin irritation.
  - H317: May cause an allergic skin reaction.
  - H335: May cause respiratory irritation.
  - H333: May be harmful if inhaled.
Trade name: Epoxy.com Product #690 MMA MV/WET Area Sealer

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC
  
  Xi: Irritant
  
  R37/38-43: Irritating to respiratory system and skin. May cause sensitization by skin contact.
  
  F: Highly flammable
  
  R11: Highly flammable.
  
- Information concerning particular hazards for human and environment:

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

- Label elements

- Labelling 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 labelling:

  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:

  16 Keep away from sources of ignition - No smoking.
  23 Do not breathe fumes / aerosol
  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.

- 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.
5 Firefighting measures
- Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water with full jet.
- Special hazards arising from the substance or mixture:
  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
- Personal precautions, protective equipment and emergency procedures:
  Wear protective equipment. Keep unprotected persons away.
  Keep away from ignition sources.
  Ensure adequate ventilation.
- Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Do not allow to penetrate the ground/soil.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Ensure adequate ventilation.
- Reference to other sections:
  Clean the accident area carefully.

7 Handling and storage
- Handling:
  Precautions 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 - 20°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.
- Specific end use(s):
  No further relevant information available.

8 Exposure controls/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:

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL (mg/m³, ppm)</th>
<th>REL (mg/m³, ppm)</th>
<th>TLV (mg/m³, ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6 methyl methacrylate (50-100%)</td>
<td>410, 100 ppm</td>
<td>410, 100 ppm</td>
<td>410, 100 ppm</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

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.
- Store protective clothing separately.
- Immediately remove all soiled and contaminated clothing.

Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.

Recommended filter device for short term use:
- Combination filter A-P2

Protection of hands:
- Only use chemical-protective gloves with CE-labelling of category III.

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 breakthrough 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:
- Tightly sealed goggles.

Body protection: Protective work clothing.
# Trade name: Epoxy.com Product #690 MMA MV/WET Area Sealer

## 9 Physical and chemical properties

*General Information*
- **Appearance:** Viscous
- **Color:** Bluish Cloudy
- **Odor:** Ester-like

*Change in condition*
- **Melting point/Melting range:** Undetermined
- **Boiling point/Boiling range:** 100°C (212 °F)

*Flash point:*
- 10°C (50 °F) (MMA, DIN 51755)

*Ignition temperature:*
- 252°C (486 °F)

*Auto igniting:*
- Product is not selfigniting.

*Danger of explosion:*
- Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

*Explosion limits:*
- **Lower:** 0.9 Vol %
- **Upper:** 12.5 Vol %

*Vapor pressure at 20°C (68 °F):*
- 38.7 hPa (29 mm Hg)

*Density at 20°C (68 °F):*
- 1 g/cm³ (8.345 lbs/gal)

*Solubility in / Miscibility with Water:*
- Not miscible or difficult to mix

*Viscosity:*
- **kinematic at 23°C (73 °F):** 42 - 48 s (DIN 53211/4)

*Other information:*
- No further relevant information available.

## 10 Stability and reactivity

*Thermal decomposition / conditions to be avoided:*
- No decomposition if used according to specifications.

*Incompatible materials:*
- Acids
- Strong oxidizing agents

*Hazardous decomposition products:*
- In the event of fire:
  - Toxic gases and vapours
  - Flammable gases/vapours

## 11 Toxicological information

*Acute toxicity:*

<table>
<thead>
<tr>
<th>Route</th>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50 &gt; 5000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>DNEL Langzeit 74.3 mg/m³ (-)</td>
</tr>
<tr>
<td></td>
<td>LD50 &gt; 5000 mg/kg (rab)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>DNEL Langzeit 210 mg/m³ (-)</td>
</tr>
<tr>
<td></td>
<td>LC50/4 h 29.8 mg/l (rat)</td>
</tr>
</tbody>
</table>
**Material Safety Data Sheet**

acc. to ISO/DIS 11014

Reviewed on 03/13

---

### Trade name: Epoxy.com Product #690 MMA MV/WET Area Sealer

#### 103-11-7 2-ethylhexyl acrylate

<table>
<thead>
<tr>
<th>Route</th>
<th>LD₅₀</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD₅₀</td>
<td>4435 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD₅₀</td>
<td>7522 mg/kg (rab)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC₅₀/4 h</td>
<td>600 mg/l (rat)</td>
</tr>
</tbody>
</table>

#### 38668-48-3 1,1’-(p-tolylimino)dipropan-2-ol

<table>
<thead>
<tr>
<th>Route</th>
<th>LD₅₀</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD₅₀</td>
<td>100 mg/kg (rat)</td>
</tr>
</tbody>
</table>

- **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

#### Acquatic toxicity:

#### 80-62-6 methyl methacrylate

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algenticität (Selenastrum capricornutum)</td>
<td>&gt; 110 mg/l (EC50/72h), OECD 201</td>
</tr>
<tr>
<td>BSB5-Wert</td>
<td>0.14 g/g (-)</td>
</tr>
<tr>
<td>Bakterientoxizität (Pseudomonas putida)</td>
<td>100 mg/l (EC3/16h)</td>
</tr>
<tr>
<td>Daphnientoxizität (Daphnia magna)</td>
<td>69 mg/l (EC50/48h), OECD 202</td>
</tr>
<tr>
<td>Fischtoxizität (Onchorhynchus mykiss)</td>
<td>&gt; 79 mg/l (LC50/96h), OECD 203</td>
</tr>
<tr>
<td>NOEC</td>
<td>9.4 mg/l (Danio rerio (Zebrabärbling)) (OECD 210 fish early life stage test)</td>
</tr>
<tr>
<td>PNEC Langzeit Wasser</td>
<td>0.94 mg/l (-)</td>
</tr>
</tbody>
</table>

#### 103-11-7 2-ethylhexyl acrylate

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algenticität (Desmodesmus subspicatus)</td>
<td>1.71 mg/l (EC50/72h)</td>
</tr>
<tr>
<td>Daphnientoxizität (Daphnia magna)</td>
<td>1.3 mg/l (EC50/48h)</td>
</tr>
<tr>
<td>Fischtoxizität (Onchorhynchus mykiss)</td>
<td>1.81 mg/l (LC50/96h)</td>
</tr>
</tbody>
</table>

#### 38668-48-3 1,1’-(p-tolylimino)dipropan-2-ol

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB-5</td>
<td>11 mg O2/g (-)</td>
</tr>
<tr>
<td>CSB</td>
<td>2360 mg O2/g (-)</td>
</tr>
<tr>
<td>Daphnientoxizität (Daphnia magna)</td>
<td>28.8 mg/l (EC50/48h)</td>
</tr>
<tr>
<td>Fischtoxizität (Danio rerio (Zebrabärbling))</td>
<td>17 mg/l (LC50/96h)</td>
</tr>
</tbody>
</table>

- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Ecotoxic effects:**

---

* USA

Reviewed on 03/13
### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Must be specially treated adhering to official regulations.

- **Uncleaned packagings**
- **Recommendation**: Disposal must be made according to official regulations.

### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>UN1866</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>RESIN SOLUTION</td>
<td>1866 RESIN SOLUTION</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>DOT, IMDG, IATA</td>
<td>3 Flammable liquids</td>
</tr>
<tr>
<td>Class</td>
<td>Label</td>
<td>3</td>
</tr>
<tr>
<td>ADR</td>
<td>Class</td>
<td>3 (F1) Flammable liquids</td>
</tr>
<tr>
<td>Label</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Packing group</td>
<td>DOT, ADR, IMDG, IATA</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards:</td>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Danger code (Kemler):</td>
<td>Warning: Flammable liquids</td>
</tr>
<tr>
<td>EMS Number:</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
<td>Not applicable.</td>
<td></td>
</tr>
</tbody>
</table>
15 Regulatory information

- Cancerogenity categories
  - EPA (Environmental Protection Agency)
    | Substance                  | Category |
    |---------------------------|----------|
    | 80-62-6 methyl methacrylate| NL       |
    | 111-76-2 2-butoxyethanol  | CBD      |
  - IARC (International Agency for Research on Cancer)
    | Substance                  | Category |
    |---------------------------|----------|
    | 80-62-6 methyl methacrylate| 3        |
    | 9011-14-7 Polymethyl Methacrylate| 3      |
    | 128-37-0 2,6-di-tert-butyl-p-cresol| 3      |
    | 111-76-2 2-butoxyethanol  | 3        |
  - NTP (National Toxicology Program)
    | Substance                  | Category |
    |---------------------------|----------|
    | None of the ingredients is listed. |
  - TLV (Threshold Limit Value established by ACGIH)
    | Substance                  | Category |
    |---------------------------|----------|
    | 80-62-6 methyl methacrylate| A4       |
    | 128-37-0 2,6-di-tert-butyl-p-cresol| A4     |
    | 111-76-2 2-butoxyethanol  | A3       |
  - MAK (German Maximum Workplace Concentration)
    | Substance                  | Category |
    |---------------------------|----------|
    | 128-37-0 2,6-di-tert-butyl-p-cresol| 4      |
    | 111-76-2 2-butoxyethanol  | 4        |
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    | Substance                  | Category |
    |---------------------------|----------|
    | None of the ingredients is listed. |
  - OSHA-Ca (Occupational Safety & Health Administration)
    | Substance                  | Category |
    |---------------------------|----------|
    | 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:
  
  X | Xi Irritant
  F | Highly flammable

- Hazard-determining components of labelling:
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:
  16 Keep away from sources of ignition - No smoking.
  23 Do not breathe fumes / aerosol
  24 Avoid contact with skin.
  33 Take precautionary measures against static discharges.
  37 Wear suitable gloves.
Trade name: Epoxy.com Product #690 MMA MV/WET Area Sealer

60 This material and its container must be disposed of as hazardous waste.

- **National regulations**
- **Technical instructions (air):**
  - **VOC USA %** 200.1 g/l / 1.67 lb/gl
- **Water hazard class:** Water hazard class 2 (Self-assessment): 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
    - 21245-02-3 2-ethylhexyl 4-(dimethylamino)benzoate
    - 9011-14-7 Polymethyl Methacrylate
    - 2082-81-7 1,4-Butandioldimethacrylat
    - 3077-12-1 2,2'-(4-methylphenyl)imino)bisethanol
    - Paraffine
    - 31570-04-4 Tris(2,4-di-tert-butylphenyl)phosphit
  - **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 24.04.2010 at the following points: *

- **Relevant phrases**
  - H225 Highly flammable liquid and vapour.
  - H301 Toxic if swallowed.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H318 Causes serious eye damage.
  - H319 Causes serious eye irritation.
  - H331 Toxic if inhaled.
  - H335 May cause respiratory irritation.
  - H401 Toxic to aquatic life.
  - H402 Harmful to aquatic life.
  - H411 Toxic to aquatic life with long lasting effects.
  - H412 Harmful to aquatic life with long lasting effects.
  - H413 May cause long lasting harmful effects to aquatic life.
  - R11 Highly flammable.
  - R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
  - R25 Toxic if swallowed.
  - R36 Irritating to eyes.
  - R37/38 Irritating to respiratory system and skin.
  - R41 Risk of serious damage to eyes.
  - R43 May cause sensitization by skin contact.
  - R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  - R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53 May cause long-term adverse effects in the aquatic environment.

Department issuing MSDS:
IGG-AD Ingenieurbüro für Gefahrstoff- und Gefahrgutberatung
Bismarckstraße 10
D-68623 Lampertheim
Fax: 0049-(0)6206-58422 http://www.igg-ad.de info@igg-ad.de

Contact:
Dr. U. Prinz (u.prinz@igg-ad.de)
Dipl.-Chem. H. Hinse (heidrun.hinse@igg-ad.de)

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)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
MAL-Code: Måleteknisk Arbejdshygienisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

* Data compared to the previous version altered.