1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
ELVACITE® ACRYLIC RESIN - POLY(MMA/EA/MAA) BASED

Product Description
Polymer based on Methyl methacrylate, Ethyl acrylate and Methacrylic acid.
This data sheet covers the following grades: 2669, 2970.

Recommended uses and restrictions on use
Manufacture of inks, paints and varnishes.

CAS No.
25133-97-5

Manufacturer
LUCITE INTERNATIONAL, Inc.
7275 Goodlett Farms Parkway
Cordova, TN 38016-4909
Phone: 1-800-4-LUCITE
msdsinfo@lucite.com

Emergency Phone No.
Transport Emergency: 1-800-424-9300
Medical Emergency: 1-877-886-2143

2. HAZARDS IDENTIFICATION

Emergency Overview
Beads.
Combustible but not readily ignited.
Low toxicity under normal conditions of handling and use.

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects
Eye Contact
Dust may cause irritation.

Skin Contact
Unlikely to cause skin irritation.
Contains greater than 0.1% residual (Methyl methacrylate, Ethyl acrylate). During normal handling this will not constitute a hazard. If the polymer matrix is destroyed e.g. when the product is dissolved in organic solvent, chemical residues will be released from the polymer matrix. Under these conditions, they may produce an allergic reaction in persons already sensitised.

Ingestion
Low oral toxicity.

Inhalation
Unlikely to be hazardous by inhalation.

Chronic (Cancer) Information
Potential decomposition product, Ethyl acrylate, is an animal carcinogen.

Teratology (Birth Defect) Information
No information but adverse effects unlikely.

Reproductive Information
No information but adverse effects unlikely.

Potential Environmental Effects
See Section 12: ECOLOGICAL INFORMATION

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICALS</th>
<th>CAS No.</th>
<th>%W/W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(Methyl methacrylate/Ethyl acrylate/Methacrylic acid)</td>
<td>25133-97-5</td>
<td>&gt;99</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation
Remove patient from exposure. Obtain medical attention if ill effects occur.

Skin Contact
Wash skin with water. If symptoms (irritation or blistering) occur obtain medical attention.
**Eye Contact**

Remove particles by irrigating with eye wash solution or clean water, holding the eyelids apart. Obtain medical attention.

**Ingestion**

Do not induce vomiting. Wash out mouth with water. Obtain medical attention if ill effects occur.

## 5. FIRE-FIGHTING MEASURES

**Flash Point (°C) [Closed cup]**

300

**Extinguishing Media**

Water spray, foam, dry powder or CO₂.

**Protection of Firefighters**

Combustible but not readily ignited. May form explosive dust clouds in air. By analogy with similar materials, the product may decompose if heated to temperatures above 200°C. Combustion or thermal decomposition will evolve toxic, irritant and flammable vapors. Incompatible materials: None known. A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

## 6. ACCIDENTAL RELEASE MEASURES

Caution - spillages may be slippery. Sweep up and shovel into waste drums or plastic bags. Wash the spillage area with water.

## 7. HANDLING AND STORAGE

**HANDLING**

Product as supplied: Avoid contact with eyes. Avoid prolonged skin contact. Unlikely to represent a dust hazard under normal handling conditions. The product may be suitable for a wide range of industrial applications and therefore it is impossible to make detailed recommendations regarding all process hazards. Thermal processing requires adequate ventilation to remove any monomer decomposition products, and use of inert atmosphere may be required in some processes to safely decompose the resin when it is used as a binder. Any thermal processing must consider the time-temperature decomposition of the resin. If the product is to be used in applications for which the hazards are not fully understood it is recommended to consult the supplier before use.

**STORAGE**

Acrylic polymers are supplied in either bags or bulk containers. Keep containers in a clean, cool and dry area away from heat sources. Natural ventilation is adequate.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational Exposure Limits

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENT(S)</th>
<th>OSHA PEL TWA</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>Company Std. TWA</th>
<th>Company Std. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulates (Total dust) (Respirable dust)</td>
<td>15 mg/m³</td>
<td>Not established.</td>
<td>Not established.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyl methacrylate</td>
<td>100 ppm 410 mg/m³</td>
<td>50 ppm (205 mg/m³)</td>
<td>100 ppm (410 mg/m³) (SEN:A4)</td>
<td>50 ppm 50 ppm</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Ethyl acrylate</td>
<td>25 ppm 100 mg/m³ (Skin)</td>
<td>5 ppm (20 mg/m³)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methacrylic acid</td>
<td>Not established.</td>
<td>20 ppm (70 mg/m³)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.
Eye Protection
Safety spectacles/goggles/full face shield.

Respirators
A suitable dust mask or dust respirator with filter type P may be appropriate. In the unlikely event of formation of particularly high levels of dust a self contained breathing apparatus may be appropriate.

Gloves
Not normally required.

Other
Wear suitable protective clothing. For information regarding process hazards refer to Section 7, Handling and Storage.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Beads.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White.</td>
</tr>
<tr>
<td>Odor</td>
<td>Typically methacrylate.</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Hazardous Reactions: None known.
Hazardous Decomposition Product(s): Methyl methacrylate, Ethyl acrylate, Methacrylic acid, Carbon dioxide, Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Inhalation
Unlikely to be hazardous by inhalation.

Skin Contact
Unlikely to cause skin irritation.
Contains greater than 0.1% residual (Methyl methacrylate, Ethyl acrylate). During normal handling this will not constitute a hazard. If the polymer matrix is destroyed e.g. when the product is dissolved in organic solvent, chemical residues will be released from the polymer matrix. Under these conditions, they may produce an allergic reaction in persons already sensitised.

Eye Contact
Dust may cause irritation.

Ingestion
Low oral toxicity.

Long Term Exposure
This type of material has been in use for many years with no evidence of adverse effects.

<table>
<thead>
<tr>
<th>Decomposition products</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Toxicity
The product is predicted to have low toxicity to aquatic organisms.

Persistence and Degradation
The product is non-biodegradable in soil. There is no evidence of degradation in soil and water.

Environmental Fate and Distribution
High tonnage material produced in partially contained systems. Solid with low volatility. The product is essentially insoluble in water. The product has low potential for bioaccumulation. The product is predicted to have low mobility in soil.

Effect on Effluent Treatment
The material is essentially insoluble in water and can therefore be separated from aqueous medium by sedimentation and filtration processes at an effluent treatment plant.
13. DISPOSAL CONSIDERATIONS

The waste is considered to be non hazardous. Clean scrap may be reprocessed. Incineration may be used to recover energy value. May be disposed of by landfill in accordance with local regulations. Certain packages are returnable. Please consult your local office for further details. Ensure that all packaging is disposed of safely.

14. TRANSPORT INFORMATION

Not Classified as Dangerous for Transport.

15. REGULATORY INFORMATION

US Federal Regulations

- Superfund reportable discharge: Not applicable.
- SARA 302 - Extremely Hazardous Substances: Not applicable.
- SARA 313 - Toxic Chemicals: Not applicable.

US State Regulations

California

SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM None known.
SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER Ethyl acrylate

Canadian Regulations

WHMIS Classification: Not classified.

European Regulations

EC Classification

- Hazard Symbol: None.
- Risk Phrases: None.
- Safety Phrases: None.

Not Classified as Dangerous for Supply/Use.

Inventory Status

- United States (TSCA): Reported/ Included.
- Canada (DSL/NDSL): Listed in DSL.
- European Union (EINECS/ELINCS): EINECS: Polymer, Monomers included.
- Japan (ENCS): Listed in ENCS.
- Philippines (PICCS): Listed in PICCS.
- South Korea (KECI): Listed in KECI.
- Australia (AICS): Listed in AICS.
- China (IECSC): Listed in IECSC.

16. OTHER INFORMATION
This Safety Data Sheet was prepared in accordance with ANSI Z400.1-2004.

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