SAFETY DATA SHEET

Product Name: Mercox II Resin
Catalog Number: 21245M, 21246M, 21247M
DOT Hazard Class: Flammable Liquid
DOT Proper Shipping Name: Methyl methacrylate monomer solution, stabilized
IATA Proper Shipping Name: Methyl methacrylate monomer, stabilized
UN/NA ID No.: UN 1247
MSDS Prepared: 4/02/2018

Distributed By: Ladd Research
83 Holly Court
Williston, VT 05495
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Hazards Identification
Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable liquids (Category 2), H225
Skin irritation (Category 2), H315
Skin sensitization (Category 1), H317
Specific target organ toxicity – single exposure (Category 3), Respiratory System, H335

GHS Label elements, including precautionary statements
Signal word Danger

Hazard Statement(s)
H225 Highly flammable liquid and vapour
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H335 May cause respiratory irritation

Precautionary Statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/lighting/equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash skin thoroughly after handling
P271 Use only outdoors or in a well-ventilated area
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/face protection
P303, P361, P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304, P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P312 Call a POISON CENTER or doctor/physician if you feel sick
P333, P313   If skin irritation or rash occurs: Get medical advice/attention
P362    Take off contaminated clothing and wash before reuse
P370, P378   In case of FIRE: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403, P233   Store in a well-ventilated place. Keep container tightly closed
P403, P235   Store in a well-ventilated place. Keep cool
P405    Store locked up
P501    Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC) or not covered by GHS
Lachrymator

HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Percent</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl methacrylate</td>
<td>80-62-6</td>
<td>60-90%</td>
<td>100 ppm (OSHA PEL)</td>
</tr>
<tr>
<td>Ethylene Glycol Dimethacrylate</td>
<td>97-90-5</td>
<td>5-20%</td>
<td>Not Established</td>
</tr>
<tr>
<td>Bis(2-ethylhexyl) phthalate</td>
<td>117-81-7</td>
<td>5-20%</td>
<td>5 mg/m^3 in air (OSHA PEL)</td>
</tr>
<tr>
<td>Proprietary Non-Haz Ingredient</td>
<td>----------</td>
<td>1-10%</td>
<td>------------------------</td>
</tr>
</tbody>
</table>

PHYSICAL AND CHEMICAL DATA

Boiling Point: ~100°C
Melting Point: ~48°C
Vapor Pressure: 38.6 mbar @ 20°C
Vapor Density: Not established
Specific Gravity: 0.943
Solubility in water: 1.6 g/100 ml @ 20°C
Solubility in other materials: Soluble in most organic solvents
Viscosity: 0.56 mPa.s @ 20°C
Appearance: Colorless liquid. Characteristic acrid acrylic odor.

FIRE AND EXPLOSION HAZARD DATA

Flash Point: 2°C
Autoignition Temperature: 430°C
Lower Explosive Limit: 2.1%
Upper Explosive Limit: 12.5%
Extinguishing Media: Carbon dioxide, dry chemical, alcohol or polymer foam
Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Use water spray to cool fire-exposed containers.
Unusual Fire and Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. May undergo auto-polymerization. Container explosion may occur under fire conditions.

HEALTH HAZARD DATA

Primary Routes of Entry: Inhalation, skin, eye

Acute Effects: Harmful if swallowed, inhaled or absorbed through skin. Vapor or mist is irritating to the eyes, mucous membranes and upper respiratory tract. Causes skin irritation. Symptoms of exposure include burning sensation, coughing wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.
**EMERGENCY AND FIRST AID**
Immediately flush eyes or skin with copious amounts of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**REACTIVITY DATA**
**Stability:** Stable.
**Hazardous Polymerization:** May occur.
**Conditions to avoid:** Avoid heat and ignition sources.
**Incompatibility:** Oxidizing agents, peroxides, bases, acids, reducing agents, amines, halogens, heat. May polymerize on exposure to light.
**Hazardous Decomposition Products:** Toxic fumes of carbon monoxide and carbon dioxide.

**SPILL, DISPOSAL AND STORAGE INFORMATION**
**Spill:** Evacuate area. Shut off all sources of ignition. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Cover with an activated carbon absorbent, take up and place in closed containers.
**Disposal:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all state, federal and local laws.
**Storage:** Store in dark, cool, dry place.

**PROTECTIVE EQUIPMENT AND CONTROL MEASURES**
**Respiratory:** OSHA or NIOSH approved respirator.
**Gloves:** Heavy rubber.
**Eye:** Chemical splash goggles or face shield.
**Ventilation:** Use in explosion-proof fume hood.

**SECTION 313 SUPPLIER NOTIFICATION**
This product contains a chemical that is subject to the reporting requirements of section 313 of the emergency planning and community right-to-know act of 1986 and of 40 CFR 372.

**Methyl methacrylate**

**Other Information**
**Full text of H-Statements referred to previously**
| Flam. Liq. | Flammable liquids |
| H225      | Highly flammable liquid and vapour |
| H315      | Causes skin irritation |
| H317      | May cause an allergic skin reaction |
| H335      | May cause respiratory irritation |
| Skin Irrit. | Skin irritation |
| Skin Sens. | Skin sensitization |

**HMIS Rating**
- Health hazard: 2
- Flammability: 3
- Physical Hazard: 0

**NFPA Rating**
- Health Hazard: 2
- Fire Hazard: 3
- Reactivity Hazard: 0

The information presented is believed to be correct and is the most accurate information available to us at this time. However, Ladd Research makes no warranty, express or implied, and assumes no liability for this information and the product described herein.