1 PRODUCT AND COMPANY IDENTIFICATION

Altuglas International
Arkema Inc.
2000 Market Street
Philadelphia, PA 19103

EMERGENCY PHONE NUMBERS:
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Information Telephone Numbers

Altuglas International Customer Service
(800) 523-1532
8:00 am - 6:00pm EST

2 COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS RegistryNumber</th>
<th>Typical %</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>&lt;0.1</td>
<td>Y</td>
</tr>
<tr>
<td>Methyl methacrylate</td>
<td>80-62-6</td>
<td>0.5 MAXIMUM</td>
<td>Y</td>
</tr>
<tr>
<td>P(EA/MMA)</td>
<td>Proprietary</td>
<td>99.2 MINIMUM</td>
<td>N</td>
</tr>
</tbody>
</table>

The substance(s) marked with a “Y” in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

While this material is not classified as hazardous under Federal OSHA regulations, this MSDS contains valuable information critical to the safe handling and proper use of this product. This MSDS should be retained and available for employees and other users of this product.

The components of this product are all on the TSCA Inventory list.

3 HAZARDS IDENTIFICATION

Emergency Overview
Clear to opaque sheet in various colors.
Odorless.
MELT PROCESSING RELEASES VAPORS WHICH MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES.

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. As a finished product, it is a synthetic, high molecular weight polymer. Due to its chemical and physical properties, this material does not require special handling other than the good industrial hygiene and safety practices employed with any industrial material of this type.

Ethyl acrylate is classified as possibly carcinogenic to humans (Group 2B) by the International Agency for Research on Cancer (IARC).
4 FIRST AID MEASURES
IF IN EYES, immediately flush with plenty of water.

IN CASE OF CONTACT, flush the area with plenty of water. Remove material from clothing. Wash clothing before reuse.

IF INHALED, remove to fresh air.

5 FIRE FIGHTING MEASURES

Fire and Explosive Properties
Auto-Ignition Temperature >400° C/752° F
Flash Point NA
Flammable Limits- Upper NA
Lower NA

Extinguishing Media
Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions
Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards
Heated material can form flammable vapors with air.

6 ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak
Contain spill. Sweep or scoop up and remove to suitable container. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

7 HANDLING AND STORAGE

Handling
Avoid temperature extremes during storage; ambient temperature preferred.

Storage
Use only with adequate ventilation.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls
Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Eye / Face Protection
Use good industrial practice to avoid eye contact.
8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Skin Protection
Minimize skin contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

Respiratory Protection
Avoid breathing dust. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

<table>
<thead>
<tr>
<th>Exposure Limit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td></td>
</tr>
<tr>
<td>ACGIH STEL</td>
<td>-</td>
</tr>
<tr>
<td>ACGIH TWA</td>
<td>-</td>
</tr>
<tr>
<td>OSHA Skin designator</td>
<td>-</td>
</tr>
<tr>
<td>OSHA TWA PEL</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>15 ppm; 61 mg/m3</td>
</tr>
<tr>
<td></td>
<td>5 ppm 20 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>25 ppm 100 mg/m3</td>
</tr>
<tr>
<td>Methyl methacrylate</td>
<td></td>
</tr>
<tr>
<td>ACGIH Sensitizer Designator</td>
<td>-</td>
</tr>
<tr>
<td>ACGIH STEL</td>
<td>-</td>
</tr>
<tr>
<td>ACGIH TWA</td>
<td>-</td>
</tr>
<tr>
<td>OSHA TWA PEL</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>100 ppm (410 mg/m3)</td>
</tr>
<tr>
<td></td>
<td>50 ppm (205 mg/m3)</td>
</tr>
<tr>
<td></td>
<td>100 ppm (410 mg/m3)</td>
</tr>
</tbody>
</table>

-Only those components with exposure limits are printed in this section.
-Skin contact limits designated with a “Y” above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
-ACGIH Sensitizer designator with a value of “Y” above means that exposure to this material may cause allergic reactions.
-WEEL-AIHA Sensitizer designator with a value of ”Y” above means that exposure to this material may cause allergic skin reactions.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor
Clear to opaque sheet in various colors.
Odorless.

pH
NA

Specific Gravity
1.15 to 1.19

Vapor Pressure
NA

Vapor Density
NA

Melting Point
132 C/270 F

Freezing Point
NA

Boiling Point
NA

Solubility In Water
Insoluble

Percent Volatile
0
10 STABILITY AND REACTIVITY

Stability
This material is chemically stable under normal and anticipated storage and handling conditions.

Hazardous Polymerization
Does not occur.

Incompatibility
Prolonged contact with acids, alkalies and strong oxidizing agents may attack or dissolve the polymer.

Hazardous Decomposition Products
Thermal decomposition may yield acrylic monomers.

11 TOXICOLOGICAL INFORMATION

Toxicological Information
No data are available.

12 ECOLOGICAL INFORMATION

Ecotoxicological Information
No data are available.

Chemical Fate Information
No data are available.

13 DISPOSAL CONSIDERATIONS

Waste Disposal
Incineration is the recommended method for disposal observing all local, state and federal regulations.

14 TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>DOT Name</th>
<th>NOT REGULATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Technical Name</td>
<td></td>
</tr>
<tr>
<td>DOT Hazard Class</td>
<td></td>
</tr>
<tr>
<td>UN Number</td>
<td></td>
</tr>
<tr>
<td>DOT Packing Group</td>
<td>PG</td>
</tr>
<tr>
<td>RQ</td>
<td></td>
</tr>
</tbody>
</table>

15 REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

<table>
<thead>
<tr>
<th>Immediate (Acute) Health</th>
<th>Fire</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed (Chronic) Health</td>
<td>Reactive</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Sudden Release of Pressure</td>
<td>N</td>
</tr>
</tbody>
</table>
The components of this product are all on the TSCA Inventory list.

**Ingredient Related Regulatory Information:**

<table>
<thead>
<tr>
<th>SARA Reportable Quantities</th>
<th>CERCLA RQ</th>
<th>SARA TPQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>1000 LBS</td>
<td>NE</td>
</tr>
<tr>
<td>Methyl methacrylate</td>
<td>1000 LBS</td>
<td></td>
</tr>
<tr>
<td>P(EA/MMA)</td>
<td>NE</td>
<td></td>
</tr>
</tbody>
</table>

**SARA Title III, Section 313**
This product does contain chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of, Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. See Section 2

Ethyl acrylate
Methyl methacrylate

**California Prop 65 - Carcinogen**
This product does contain the following chemical(s), as indicated below, currently on the California list of Known Carcinogens.

Ethyl acrylate

**Massachusetts Right to Know**
This product does contain the following chemicals(s), as indicated below, currently on the Massachusetts Right to Know Substance List.

Ethyl acrylate
Methyl methacrylate

**New Jersey Right to Know**
This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right-to-Know Substances List.

Ethyl acrylate
Methyl methacrylate

**Pennsylvania Environmental Hazard**
This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Environmental Hazard List.

Ethyl acrylate
Methyl methacrylate

**Pennsylvania Right to Know**
This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.

Ethyl acrylate
Methyl methacrylate

**Pennsylvania Special Hazard**
This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Special Hazard List.

Ethyl acrylate

### 16 OTHER INFORMATION

**Revision Information**

Revision Date: 03 MAY 2005
Supercedes Revision Dated: 03-MAY-2005

**Revision Summary**
The Atoglas Division of Arkema Inc. has changed its name to Altuglas International.

**Key**
NE = Not Established  NA = Not Applicable  (R) = Registered Trademark
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