

1. PRODUCT AND COMPANY IDENTIFICATION

Company

Arkema Inc. 2000 Market Street Philadelphia, Pennsylvania 19103

Altuglas International

Emergency Information

Transportation:

Medical:

CHEMTREC: (800) 424-9300 (24 hrs., 7 days a week) Rocky Mountain Poison Center: (303) 623-5716 (24 hrs., 7 days a week)

Product Information

Product name: Synonyms: Molecular formula: Chemical family: Product use: PLEXIGLAS® MC ACRYLIC SHEET Not available Not available acrylic copolymer Special applications, in general

2. HAZARDS IDENTIFICATION

Emergency Overview

Color:	clear
Physical state:	solid
Form:	sheets
Odor:	odourless

CAUTION! PROCESSING MAY RELEASE VAPORS AND/OR FUMES WHICH CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Potential Health Effects

Primary routes of exposure: Inhalation and skin contact.

Signs and symptoms of acute exposure:

High molecular weight polymer. The product, in the form supplied, is not anticipated to produce significant adverse human health effects. Effects due to processing releases or residual monomer: Irritating to eyes, respiratory system and skin. (severity of effects depends on extent of exposure) Prolonged or repeated exposure may cause: drowsiness, nausea, headache, weakness.

Repeated exposure:

Data for residual monomer: Classified by the International Agency for Research on Cancer as: Group 2B: Possibly carcinogenic to humans. (2-propenoic acid, ethyl ester)



Remarks:

Handle in accordance with good industrial hygiene and safety practice. (sheets) This product may release fume and/or vapor of variable composition depending on processing time and temperature. Hazardous decomposition products may include confirmed or suspected carcinogens. Secondary operations, such as grinding, sanding or sawing, can produce dust which may present a respiratory hazard.

3. COMPOSITION/INFORMATION ON INGREDIENTS			
Chemical Name	CAS-No.	Wt/Wt	OSHA Hazardous
Acrylic copolymers	Proprietary*	98 - 100 %	Ν
2-Propenoic acid, ethyl ester	140-88-5	>= 0.1 - < 1 %	Y

The substance(s) marked with a "Y" in the Hazard column above, are those identified as hazardous chemicals under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

*The specific chemical identity is withheld because it is trade secret information of Arkema Inc.

This material is classified as hazardous under Federal OSHA regulation.

4. FIRST AID MEASURES

Inhalation:

If inhaled, remove to fresh air.

Skin:

In case of contact, immediately flush skin with plenty of water. If molten polymer gets on the skin, cool rapidly with cold water. Do not peel solidified product off the skin. Obtain medical treatment for thermal burns. Remove material from clothing. Wash clothing before reuse.

Eyes:

Immediately flush eye(s) with plenty of water. Obtain medical treatment for thermal burns.

Ingestion:

If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Flash point	not applicable
Auto-ignition temperature:	860 °F (460 °C)
Lower flammable limit (LFL):	not applicable
Upper flammable limit (UFL):	not applicable
Extinguishing media (suitable):	



Dry chemical, water spray, carbon dioxide, foam

Protective equipment:

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).

Further firefighting advice:

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:

Pick up and transfer to properly labelled containers. 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

<u>Handling</u>

General information on handling:

Avoid breathing processing fumes or vapors. Avoid breathing dust. Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing.

Storage

General information on storage conditions:

Avoid extreme temperatures.

Storage incompatibility – General:

Store away from sources of heat and light.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Guidelines:

2-Propenoic acid, 2-methyl-, methyl ester (80-62-6)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA):50 ppmShort Term Exposure Limit (STEL):100 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Product code: 11727

PEL:

100 ppm (410 mg/m3)

2-Propenoic acid, ethyl ester (140-88-5)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA):5 ppmShort Term Exposure Limit (STEL):15 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL:

25 ppm (100 mg/m3)

Skin designation Remarks:

Can be absorbed through the skin.

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required. Limits with a sensitizer designation above mean that exposure to this material may cause allergic reactions.

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 above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Respiratory protection:

Avoid breathing processing fumes or vapors. Avoid breathing dust. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components and substances released during processing. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or 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.

Skin protection:

Processing of this product releases vapors or fumes which may cause skin irritation. Minimize skin contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after contact with processing fumes or vapors. Wash thoroughly after handling.

Eye protection:

Processing of this product releases vapors or fumes which may cause eye irritation. Use good industrial practice to avoid eye contact. Where eye contact may be likely, wear chemical goggles and have eye flushing equipment available.



9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	clear
Physical state:	solid
Form:	sheets
Odor:	odourless
pH:	not applicable
Density:	not applicable
Vapor pressure:	not applicable
Vapor density:	not applicable
Boiling point/boiling range:	not applicable
Freezing point:	not applicable
Melting point/range:	not applicable
Solubility in water:	insoluble
% Volatiles:	0 %

10. STABILITY AND REACTIVITY

Stability:

The product is stable under normal handling and storage conditions

Hazardous reactions:

Hazardous polymerization does not occur.

Materials to avoid:

None under normal conditions of use.

Conditions / hazards to avoid:

Avoid flames, welding arcs, potential ignition sources, or other high temperature sources which induce thermal decomposition.

Hazardous decomposition products:

Thermal decomposition may yield acrylic monomers. Thermal decomposition begins to generate monomer vapor at >570F (>300 C).

11. TOXICOLOGICAL INFORMATION

Data on this material and/or its components are summarized below.

Data for 2-Propenoic acid, ethyl ester (140-88-5)

Carcinogenicity

Chronic inhalation, dermal application, drinking water administration to rat and mouse / No increase in tumor incidence was reported.

Chronic oral gavage administration to rat and mouse / affected organ(s): forestomach / Increase in tumor incidence was reported. (Effect occurred at levels causing significant irritation.) Classified by the International Agency for Research on Cancer as: Group 2B: Possibly carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Chemical Fate and Pathway

No data are available.

Ecotoxicology

No data are available.

13. DISPOSAL CONSIDERATIONS

Waste disposal:

Where possible recycling is preferred to disposal or incineration. If recycling is not an option, incinerate or dispose of in accordance with federal, state, and local regulations. Pigmented, filled and/or solvent laden product may require special disposal practices in accordance with federal, state and local regulations. 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. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14. TRANSPORT INFORMATION

US Department of Transportation (DOT): not regulated

International Maritime Dangerous Goods Code (IMDG): not regulated

15. REGULATORY INFORMATION		
Chemical Inventory Status		
EU. EINECS	EINECS	Conforms to
US. Toxic Substances Control Act	TSCA	The components of this product are all on the TSCA Inventory.



Australia. Industrial Chemical (Notification and Assessment) Act	AICS	Does not conform
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	DSL	This product contains one or several components listed in the Canadian NDSL list. All other components are on the DSL list.
Japan. Kashin-Hou Law List	ENCS (JP)	Does not conform
Korea. Toxic Chemical Control Law (TCCL) List	KECI (KR)	Conforms to
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	PICCS (PH)	Conforms to
China. Inventory of Existing Chemical Substances	IECSC (CN)	Conforms to
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	NZIOC	Conforms to

United States – Federal Regulations

SARA Title III – Section 302 Extremely Hazardous Chemicals:

The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

SARA Title III - Section 311/312 Hazard Categories:

Acute Health Hazard, Chronic Health Hazard

SARA Title III – Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	De minimis concentration	Reportable threshold:
2-Propenoic acid, ethyl ester	140-88-5	0.1 %	10000 lbs (Otherwise used (non- manufacturing/processing)) 25000 lbs (Manufacturing and processing)

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantity (RQ):

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Reportable quantity</u>
2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	1000 lbs
2-Propenoic acid, ethyl ester	140-88-5	1000 lbs



OSHA Regulated Carcinogens (NTP, IARC, OSHA Listed):

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC:

Chemical Name	CAS-No.	Attribute
2-Propenoic acid, ethyl ester	140-88-5	Group 2B (Possible carcinogen.)

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

United States – State Regulations

Massachusetts Right to Know

Chemical Name	CAS-No.
2-Propenoic acid, ethyl ester	140-88-5

Massachusetts Right to Know - Extraordinarily Hazardous Substance(s)

Chemical Name	CAS-No.
2-Propenoic acid, ethyl ester	140-88-5

New Jersey Right to Know

No components are subject to the New Jersey Right to Know Act.

Pennsylvania Right to Know

<u>Chemical Name</u>	<u>CAS-No.</u>
Acrylic copolymers	Proprietary
2-Propenoic acid, ethyl ester	140-88-5

2-Propenoic acid, ethyl ester

Pennsylvania Right to Know - Environmentally Hazardous Substance(s)

Chemical Name	CAS-No.
2-Propenoic acid, ethyl ester	140-88-5

Pennsylvania Right to Know – Special Hazardous Substance(s)

Chemical Name	CAS-No.
2-Propenoic acid, ethyl ester	140-88-5

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

Chemical Name	CAS-No.
2-Propenoic acid, ethyl ester	140-88-5

Product code: 11727



16. OTHER INFORMATION

Latest Revision(s):

Reference number:	00000036594
Date of Revision:	01/23/2009
Date Printed:	01/23/2009

ALTUGLAS® is a registered trademark of Arkema Inc. PLEXIGLAS® is a registered trademark of Arkema Inc.

Arkema Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of Arkema Inc., Arkema Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.