

multigraph[®]

Date: 03/15/2006

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Rowmark, Inc. EMERGENCY PHONE NUMBERS:

2040 Industrial Drive Medical: 911

Findlay, OH 45840 Poison Control: 800-589-3897

USA

<u>Telephone Numbers</u> <u>Phone Number</u> <u>Available Hours</u> Rowmark Customer Service 1-877-ROWMARK 7:00am-5:00pm EST

International 419-425-8974

Product Name: multigraph®

Product Synonym(s): Co-extruded ABS/PMMA sheets

Chemical Family: Polymer Chemical Formula: Mixture Chemical Name: Mixture

EPA Reg Number:

Product Use: Signage, Other

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS Registry Number	Typical Wt. %	<u>OSHA</u>
Acrylonitrile/butadiene/styrene resin			
	9003-56-9	50-80%	
PMMA	910-88-2	50-80%	
Ethyl acrylate	140-88-5	< 0.1%	
May contain the following:			
Mineral oil	008042-47-5	0- 2%	
Tallow	008030-12-4	0- 2%	
Wax	000110-30-5	0- 2%	

The substance(s) marked with a "Y" in the OSHA column are identified as hazardous chemicals according to the criteria of the OSHA Hazardous 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.

Date: 03/15/2006



3. HAZARDS INDENTIFICATION

EMERGENCY OVERVIEW: Various colors; Characteristic odor

POTENTIAL HEALTH EFECTS: In case of thermal decomposition, traces of hydrocarbons (ethyl benzene, styrene). Thermal decomposition products are carbon monoxide, carbon dioxide and water

4. FIRST AID MEASURES

IF IN EYES: Flush eyes with plenty of water; remove contact lenses after the first 1-2 minutes then continue flushing for several minutes. Only mechanical effects expected.

IN CASE OF CONTACT: If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage.

IF INHALED: Move person to fresh air; if effects occur, consult a physician.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES:

Auto-Ignition Temperature >400 C/752 F

Flash Point- >330 C/626 F Flash Point Method

Flammable Limits- Upper NA Lower NA

EXTINGUISHING MEDIA: Use water spray, carbon dioxide, foam or alcohol resistant foam.

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. Soak burned material with water to avoid a renewed ignition.

6. ACCIDENTAL RELEASE MEASURES

PROTECT PEOPLE: Chips or dust may present a slipping hazard.

CLEANUP: Sweep up chips or dust in a waste disposal container. Flush area with water.

7. HANDLING AND STORAGE

HANDLING: Good housekeeping and controlling dusts are necessary for safe handling of product. Workers should be protected from the possibility of contact with molten resin during fabrication. Large masses of molten polymer held at elevated temperatures for extended periods of time may auto-ignite.

STORAGE: Store horizontally in a cool, dry place. Avoid UV radiation.

Date: 03/15/2006



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS: Adequate ventilation in work area is needed due to dust or vapors created during fabrication.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

EYE/FACE PROTECTION: Safety glasses or face shield should be used. If exposed to dust, chemical glasses may be required.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed. Use insulated gloves for thermal protection, when desired. Wash hands before breaks or end of workday.

RESPIRATORY PROTECTION: In dusty atmospheres, use an approved respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ODOR: Various colors, odorless.

BOILING POINT: N/A

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SPECIFIC GRAVITY: 1.05 - 1.10

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable, reacts with oxidizing agents

CONDITIONS TO AVOID: Avoid excessive temperatures. At temperatures above 300 C, decomposition of the polymer starts under releasing of decomposition products. Avoid strong oxidizing agents.

11. TOXICOLOGY INFORMATION

No data available

12. ECOLOGICAL INFORMATION

MOVEMENT & PARTITIONING: No bio-concentration is expected because of the relatively high molecular weight (MW >1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

DEGRADATION & PERSISTENCE: This water insoluble polymeric solid is expected to be inert in the environment. Surface photo degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

ECOTOXICITY: Not expected to be acutely toxic, but chips may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

Date: 03/15/2006



13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with applicable governmental regulations.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

CANADIAN TDG INFORMATION: This product is not regulated by TDG when shipped domestically by land.

15. REGULATORY INFORMATION

(Not meant to be all-inclusive – selected regulations represented)

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

Immediate (Acute) Health N Delayed (Chronic) Health N Sudden Release of Pressure N Reactive N

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

INGREDIENT RELATED REGULATORY INFORMATION:

SARA REPORTABLE QUANTITIES

Ethyl acrylate

CERCLA RQ SARA TPQ

1000 LBS

N/A

1000 LBS

P (EA/MMA)

N/A

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 986 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 MSDS No: 00032

Date: 03/15/2006

Page 5 of 5



15. REGULATORY INFORMATION (cont'd)

NEWJERSEY 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

0 Reactivity

NFPA HAZARD RATING (National Fire Protection Association):

FIRE: Materials that must be preheated before ignition can

HEALTH: Materials that under emergency conditions would offer no hazard beyond that of ordinary

combustible materials.

REACTIVITY: Materials that in themselves are normally Special

stable, even under fire exposure conditions.

REASON FOR ISSUE:

Fire

1

Health 0