FlexiBrass® & FlexiColor®

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

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

International 419-425-8974

Product Name: FlexiBrass® & FlexiColor®

Product Synonym(s): Film-stamped Impact Modified Acrylic

Chemical Family: Acrylic Copolymer

Chemical Formula: Mixture Chemical Name: Mixture

Rowmark

EPA Reg Number:

Product Use: Signage, Other

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS Registry Number	Typical Wt. %	<u>OSHA</u>
P (EA/MMA)	Proprietary	50-54	N
Acrylic Styrene Copolymer	Proprietary	35-50	N
Methyl methacrylate	80-62-6	< 0.5	Υ
Ethyl acrylate	140-88-5	< 0.1	Υ
Aluminium Flake	7429-90-5	1-5	
Carbon Black	1333-86-4	1-5	
Copper	7440-50-8	1-5	

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.

3. HAZARDS INDENTIFICATION

EMERGENCY OVERVIEW:

Various colors with characteristic odor. CAUTION! MELT PROCESSING RELEASES VAPORS WHICH MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION

POTENTIAL HEALTH EFECTS:

Skin contact and inhalation of dust 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 pellet. 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 listed as a substance that may reasonably be anticipated to be a carcinogen by the National Toxicology Program (NTP) and is classified as "possibly carcinogenic to humans" by the International Agency for Research on Cancer.

4. FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water. Get medical attention if irritation persists.

IN CASE OF CONTACT, flush the area with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops and persists.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES:

Auto-Ignition Temperature 393 C/739 F

Flash Point- NA Flash Point Method

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. Can include carbon monoxide, carbon dioxide, small quantities of nitric oxides (NO_x), trace levels of hydrogen chloride and acetic acid.

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 contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation.

STORAGE: Avoid temperature extremes during storage; ambient temperature preferred.



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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ODOR: Various colors, characteristic odor

BOILING POINT: N/A

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SPECIFIC GRAVITY: 1.15-1.19

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Prolonged contact with acids, alkalis and strong oxidizing agents may attack or dissolve the polymer.

11. TOXICOLOGY INFORMATION

No data available

12. ECOLOGICAL INFORMATION

MOVEMENT & PARTITIONING: 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.



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 Fire

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

Methyl methacrylate

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 Aluminium Copper

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 Toluene Mercury

This product may contain trace levels of components known to the state of California to cause cancer:

Antimony (3+) Trioxide

Arsenic



Cadmium
Chromium (6+)
3.3'-Dichlorobenzidine
Formaldehyde
Lead
Nickel
Selenium Sulphide

15. REGULATORY INFORMATION (cont'd)

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
Antimony (3+) Trioxide
Arsenic
Cadmium
Chromium (3+), (6+)
3.3'-Dichlorobenzidine
Formaldehyde
Lead
Nickel
Vinyl Acetate

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 Chromium (3+) Formaldehyde

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

NFPA HAZARD RATING (National Fire Protection Association):

Fire
1
Health 0 0 Reactivity

Special

FIRE: Materials that must be preheated before ignition can occur.

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

REACTIVITY: Materials that in themselves are normally stable, even under fire exposure conditions.

REASON FOR ISSUE: