

1. PRODUCT AND COMPANY IDENTIFICATION

Rowmark, LLC
2040 Industrial Drive
Findlay, OH 45840
USA

EMERGENCY PHONE NUMBERS:
Medical: 911
Poison Control: 800-589-3897

<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: Safe T Mark
Product Synonym(s): Film-stamped Flame Retardant ABS
Chemical Family: Polymer
Chemical Formula: Mixture
Chemical Name: Mixture
EPA Reg Number:
Product Use: Signage, Other

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>CAS Registry Number</u>	<u>Typical Wt. %</u>	<u>OSHA</u>
Acrylonitrile/butadiene/styrene resin	9003-56-9	70-80%	
Brominated Compound		20-30%	Y
Antimony Compound	1309-64-4	20-30%	Y

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 IDENTIFICATION**Emergency Overview:**

APPEARANCE: Various colors; Characteristic odor

Potential Health Effects:

EYE: Solid or dust may cause irritation or corneal injury due to mechanical action.

SKIN: Essentially non-irritating to the skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns. No adverse effects anticipated by skin absorption.

INGESTION: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

INHALATION: Dust may cause irritation to upper respiratory tract (nose and throat).

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

Flammability:	Flame Retardant
Auto-Ignition Temperature:	N/A
Flash Point:	N/A
Flammable Limits:	Upper: N/A
	Lower: N/A

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 hydrogen bromide, bromine

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 dry place.

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: ~1.20 g/cm³

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Avoid temperatures above 572° F (300° C). Such exposure can cause product to decompose. Thermal decomposition may produce hydrogen bromide, bromine, carbon monoxide and/or carbon dioxide

11. TOXICOLOGY INFORMATION

<i>Value (LD50 or LC 50)</i>	<i>Animal</i>	<i>Routes</i>	<i>Components</i>
>2 g/Kg & >34.6 g/KG	Rabbit – Rat	Dermal – Oral	Antimony Compound
>2 g/Kg & >5 g/KG	Rabbit – Rat	Dermal – Oral	Brominated Compound

Toxicological Information: This components listed above are believed not to have toxic characteristics because of the way the individual components were encapsulated within a polymeric substrate and thus bound and free from direct contact.

12. ECOLOGICAL INFORMATION

MOVEMENT & PARTITIONING: No bioconcentration 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.

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)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: This product may contain chemicals which are listed in Section 313 above the minimum concentration.

Material

Bromine Compound
Antimony Compound
Arsenic

STATE REGULATIONS: None Known -----

16. OTHER INFORMATION

NFPA HAZARD RATING (National Fire Protection Association):

Fire
0
Health 1 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: