



SDS No: 0009 Section 1. **Product and Company Identification** Product Name: General Purpose Utility Grade Sheet Trade Name: **ABS** Recommended Use: Signage, Other Restrictions on Use: None In Case of Emergency: Call: Medical: 911 Manufacture: Rowmark 5409 Hamlet Drive Poison Control: 800-589-3897 Findlay, OH 45840 Information: Call: 1-877-ROWMARK Email: techhelp@rowmark.com

GHS Classification: Not Classified GHS Label Elements: Not Applicable

GHS Rating

Health	5
Flammability	4
Instability	5

Other Hazards: Not Applicable

GHS Hazard Categories

Category 1 = Severe Hazard
Category 2 = Serious Hazard

Category 3 = Moderate Hazard
Category 4 = Slight Hazard

Category 5 = Minimal Hazard

Section 3. Composition / Infor	mation on Ingredie	nts
Name	CAS#	% by Weight
Acrylonitrile/butadiene/styrene resin	009003-56-9	90-100%
May contain the following:		
Mineral Oil	008042-47-5	0-2%
Tallow	008030-12-4	0-2%
Wax	000110-30-5	0-2%

^{*} Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

Section 4.	First Aid Measures
Inhalation:	Dust and process vapors may be irritation to the nose, throat and respiratory tract. Remove to fresh air. If
Eyes:	Dust, fines and process vapors may irritate the eyes. Immediately flush eyes with water for at least 15
Skin:	Exposure to molten plastic may cause thermal burns. If molten material comes in contact with the skin, cool
Ingestion:	No adverse health effects expected from ingestion.

Section 5. Fire-Fighting Me	asures
Suitable Extinguishing Methods:	Dry Chemical, Water Spray, Foam Carbon Dioxide. Avoid using direct streams of water on molten burning material.
Unsuitable Extinguishing Methods:	NONE known.
Hazards During Fire-fighting:	Carbon monoxide, carbon dioxide, original monomer other hydrocarbon oxidation products.
Protective Equipment:	Wear self-contained breathing apparatus and protective suit.

Section 6. Accidental Relea	ase Measures
Personal Precautions:	See Section 8 - Exposure Controls / Personal Protection.
Environmental Precautions:	No Special environmental precautions required.

Methods and Materials for Containment and Cleaning Up

Spill / Leak: Containment of this material should not be necessary. Sweep up or gather material and place in

Section 7. Handling and Storage

Handling:

Keep away from heat, flame and strong oxidizing agents. 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: Keep away from heat, sparks, and flame. Store horizontally in cool, dry place in original container and

Section 8. Exposure Control and Personal Protection

Exposure Limits:

1) Effects of Acute Exposure:	See section 11, Toxicological Information
2) Effects of Over Exposure:	See section 11, Toxicological Information

3) OSHA Permissible Exposure Li Chemical		OSHA PEL	ACGIH TLV
		5 mg/m3 (respirable) 15 mg/m3 (total) TWA	None Established
	Styrene	100 ppm TWA	20 ppm TWA

4) Carcinogen Potential: See section 11, Toxicological Information

Engineering Controls:

Use recommended safe handling practices to minimize unnecessary exposure.

General room ventilation is adequate for storage and ordinary handling.

Use local exhaust at points of fume generation or if dusty conditions prevail.

Personal Protective Equipment:

Wear safety glasses with side shields or chemical goggles to prevent eye contact.

Have eye-washing facilities readily available where eye contact can occur.

Wear impervious gloves and protective clothing to prevent skin contact.

Section 9. Physical and Chemical Properties			
Appearance: Various colors,	Various color	Vapor Pressure:	Not applicable
Odor:	Slight, sweet, aromatic	Vapor Density:	3.6 (styrene
pH:	Not applicable	Relative Density:	Approx. 1.05
Melting Point / Freezing Point:	Not established	Solubility (ies):	Insoluble in water
Boiling Point:	Not Applicable	Partition Coefficient (N-Octano	l/∖ Not applicable
Flash Point:	388-400°C (730-752°F)	Auto-Ignition Temperature:	495-510°C (923-950°F)
Evaporation Rate:	Not Applicable	Decomposition Temperature:	Approx. 260°C (500°F)
Flammability (solid, gas):	Dust and molten	Viscosity:	Not applicable
Upper Explosive Limit:	Not established	Specific Gravity:	1.05-1.12
Lower Explosive Limit:	Not established	Percent Volatile:	0%

Section 10. Stability Reactivity

Reactivity:	Hazardous polymerization does not occur
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	None known
Conditions to Avoid:	Avoid flames, welding arcs, potential ignition sources, or other high temperature sources, prolonged contact with acids, alkalis and strong oxidizing agents
Incompatible Materials:	None known
Hazardous Decomposition Products:	Thermal decomposition will generate carbon dioxide, carbon monoxide, styrene,
Combustion Products:	No data available

Section 11. Toxicological Information

Irritation Effects

Eye Irritation: Solid particles may cause transient irritation from mechanical abrasion.

Skin Irritation:	Not expected to cause skin irritation. Molten material may cause thermal burns.
Inhalation:	Not a likely route of exposure. Process fumes may cause irritation.
Ingestion:	May cause a choking hazard if swallowed.

General Effects of Exposure

Accute Effects of Exposure: Gases and fumes evolved during thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract and cause nausea, drowsiness and headache.

Chronic (non-cancer) Effects of Exposure: Not expected to cause any adverse chronic health effects.

Carcinogenicity:

None of the components present at 0.1% or greater have been classified as a carcinogen.

Styrene IARC - Overall evaluation: 2B Possible carcinogen

IARC - Evidence of carcinogenicity in animals: Limited data IARC - Evidence of carcinogenicity in humans: Limited data NTP - Reasonably anticipated to be a human carcinogen ACGIH - A4: Not classifiable as a Human Carcinogen

Product Toxicity Data

Toxicity Note: Toxicity data is based on similar to ABS resins.

Skin Irritation: rabbit - non-irritating.

Eye Irritation: rabbit - Draize - slightly irritating.

Other Relevant Toxicity Information: Styrene is slightly toxic to practically non-toxic in oral feeding studies (rats) and skin

Toxicity Data for Acrylonitrile/Butadiene/Styrene Terpolymer

Acute Oral Toxicity: LD50 > 5000 mg/kg (rat)

Acute Dermal Toxicity: LD50 >2,000 mg/kg (rabbit) estimated

Skin Irritation: rabbit – Draize – No skin irritation

Eye Irritation: rabbit – Slightly irritating

Sensitization: Dermal – non-sensitizer (guinea pig Buehler Test)

Toxicity Data for Styrene

Acute Oral Toxicity: LD50 1000 mg/kg (rat)

Acute Inhalation Toxicity: LC50 11.8 mg/L/4 hr (rat)
Acute Dermal Toxicity: LD50 >20,000 mg/kg (rabbit)
Skin Irritation: rabbit – Draize – moderately irritating
Eye Irritation: rabbit – Draize – severely irritating

Sensitization: Dermal – non-sensitizer (guinea pig maximization test (GPMT))

Additional Toxicological Information

When used and handled according to specifications, the product does not have any harmful effects according to research and information provided by suppliers.

Carcinogenic Effect

International Agency for Research on Cancer (IARC): Group3 NOT classifiable as to its carcinogenicity to humans.

Section 12. Ecological Information	mation
Eco-toxicity:	Toxicity to fish - No relevant studies identified.
Persistence and Degradability:	This material is not expected to be readily biodegradable.
Bio-accumulate Potential:	Product is not likely to accumulate in biological organisms.
Mobility in Soil:	This Product has not been found to migrate through soils.
Other Adverse Effects:	This Substance is not in Annex I of Regulation (EC) 2037/2000 on substances that

Ecological Data for Acrylonitrile/Butadiene/Styrene Terpolymer

Biodegradation: Not readily biodegradable

Bioaccumulation: Does not bioaccumulate

Acute and Chronic Toxicity to Fish LC50: 18 mg/L/96 hr common carp (cyprinus carpio)

Ecological Data for Styrene

Biodegradation:

Biological Oxygen Demand (BOD):5 days, 2.46 mg/LChemical Oxygen Demand:2800-2880 mg/gTheoretical Biological Oxygen Demand (ThBOD):3.07 mg/LBioaccumulation:Carp 13.5 BCF

Acute and Chronic Toxicity to Fish

LC50 9 mg/L/96 hr sheepshead minnow (cyprinodon variegatus)

LC50 29 – 59.3 mg/L/96 hr fathead minnow (pimephales promelas)

LC50 25 mg/L/96 hr bluegill (lepomis macrochirus)

LC50 2.4 – 4.1 mg/L/96 hr rainbow trout (salmo gairdneri)

Acute Toxicity to Aquatic Invertebrates

EC50 4.7 - 23 mg/L/48 hr water flea (daphnia magna)

Toxicity to Aquatic Plants

EC50 1.4 mg/L/72 hr green algae (selenastrum capricornutum)

Toxicity to Microorganisms

EC50 approx. 500 mg/L/30 min activated sludge microorganisms

EC50 5.5 mg/L/5 min photobacterium phosphoreum

EC50 72 mg/L/16 hr pseudomonas putida

Section 13. Disposal Considerations

Disposal Methods

Product Recommendation:

- 1. Recycle (Reprocess) if product has not been contaminated so as to make it unsuitable for its intended use.
- 2. Disposal through controlled incineration or authorized waste dump in accordance with Local, State or Federal Regulations.

Uncleaned Packaging Recommendation:

1. Disposal must be done in accordance with Local, State, or Federal Regulation.

Section 14. Transportation Information				
UN Number:	Not Relevant			
UN Proper Shipping Name:	Not Relevant			
Transportation Hazard Class(es)				
DOT:	Not Regulated/classified			
TDG:	Not Regulated/classified			
ADR / RID:	Not Regulated/classified			
IMDG:	Not Regulated/classified			
ICAO/IATA	Not Regulated/classified			
Packing Group:	Not Applicable			
Environmental Hazards:	Not Relevant			
Transportation in Bulk (According t	to Annex II of MARPOL 73/78 and IBC Code):	Not Relevant		
Special Precautions for User:	No special precautions			

Section 15. Regulatory Information

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

United States Federal Regulations

US OSHA Hazard Communication Classification: This product is hazardous under the criteria of the Federal OSHA Hazard

US Toxic Substance Control Act: All the components of this product are listed on the TSCA Inventory

US EPA CERCLA Hazardous Substances (40 CFR 302):

Components

Styrene 100-42-5 < 0.1% RQ=1000 lbs

SARA Section 311/312 Hazard Categories: Not Hazardous

US EPA Emergency Planning and Community Right to Know Act (EPCRA) SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Components

None

Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Components

Styrene 100-42-5 < 0.1%

US EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII If discarded in purchased form, this product would not be a hazardous waste either by listing or by characteristic. However,

Canadian Regulations

Canadian CEPA Status: All of the components of this product are listed on the DSL.

OSHA HazCom: This Material is not Hazardous b OSHA Hazardous Communication Standard 29 CFR 1910.1200



WARNING:

This product can expose you to chemicals including styrene, which is known to the State of California to cause cancer.

For more information go to www.P65Warnings.ca.gov

Other Information Section 16.

The information presented in this Safety Data Sheet is based on data considered to be accurate as of the date this Safety Data Sheet was prepared. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In additional, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

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