

Material Safety Data Sheet

Freeman 1060 Resin

Date of Preparation: June 28, 2007

Revision:

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Freeman 1060 Resin

Chemical Family: Isocyanate

CAS Number: N/A

Other Designations: N/A

Intended Use or Product Type: Polyurethane Resin

Manufacturer: Freeman Manufacturing and Supply Company, 1101 Moore Road, Avon, OH 44011,

Phone (440)934-1902, FAX (440)934-7200, Hours of Operation 8-5, Emergency Phone Number 800-424-9300

HMIS

H 2

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PPE†

†Sec. 8

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Corrosive – Causes eye burns and skin irritation. Harmful if inhaled. May cause allergic skin and respiratory reactions.
Moisture Sensitive

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	%
Isophorone Diisocyanate	4098-71-9	< 5
Hydrogenated MDI	5124-30-1	10-30
Cycloaliphatic diisocyanate prepolymer	119185-07-8	60-100

Ingredient	OSHA		ACGIH		Vapor Pressure
	PEL	STEL	TWA	STEL	
Isophorone Diisocyanate	none estab.	0.02 ppm	0.005 ppm	none estab.	.0003 mmHg @ 68°F
Hydrogenated MDI	none estab.	none estab.	0.005 ppm	none estab.	0.4 mmHg @ 302°F

Section 3 - Physical and Chemical Properties

Physical State: Liquid

Appearance and Odor: Translucent liquid, slight odor.

Viscosity: 15,000-40,000 cps

Vapor Pressure: Not established

Vapor Density (Air=1): >1

Specific Gravity (H₂O=1, at 4 °C): 1.06

pH: Not determined

Water Solubility: Reacts with water

Boiling Point: Not determined

% Volatile: Negligible

Evaporation Rate: Not determined

VOC: 0.021 g/L

Section 4 - Fire-Fighting Measures

Flash Point: >200 °F (>93 °C)

Flash Point Method: Estimated

LEL: Not established

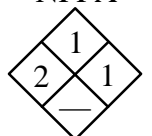
UEL: Not established

Extinguishing Media: Carbon dioxide, dry chemical, foam, water.

Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

Fire-Fighting Equipment: Use self-contained breathing apparatus.

NFPA



Section 5 - Stability and Reactivity

Stability: Stable.

Conditions to Avoid: Excessive heat for prolonged periods of time.

Incompatibility: Strong oxidizers, acids, and bases.

Hazardous Decomposition Products: Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

Hazardous Polymerization: Will not occur.

Section 6 - Health Hazard Information

Potential Health Effects

Primary Entry Routes: Dermal; heated product may produce inhalable vapors.

Overexposure Effects: Contact with liquid causes eye and skin irritation. If inhaled causes breathlessness, chest discomfort, and reduced pulmonary function. May cause allergic skin and respiratory reactions in some individuals, leading to asthma type spasms of the bronchial tubes and difficulty in breathing.

Medical Conditions Aggravated by Exposure: Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases, eye conditions or recurrent skin eczema or sensitization should be excluded from working with isocyanates.

Additional Information: Referral to a physician is recommended if there is any question about the seriousness of any injury.

Emergency and First Aid Procedures

Inhalation: Remove to fresh air. Call a physician.

Eyes: Immediately flush eyes with water for at least 15 minutes. Call a physician.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before use. Destroy contaminated shoes.

Ingestion: If conscious give 2-4 glasses of water to drink. Do not induce vomiting. Call a physician.

Section 7 - Spill, Leak, and Disposal Procedures

Accidental Release Measures: Remove spillage by absorbing in absorbent material.

Waste Disposal Method: Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

Ecological Information:

Toxicological Information:

Inhalation Toxicity (LC50): Component(s) are toxic, 2-20 mg/l or 200-2000 ppm.

Sensitization: Causes allergic skin and respiratory sensitivity in some people.

Skin Irritation: Irritant.

Eye Irritation: Corrosive. Causes burns.

Regulatory Information

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazardous Communication Standard 29 CFR 1910,1200. This product is considered to be a hazardous chemical under that standard.

Resource Conservation and Recovery Act (RCRA): Not specifically listed as hazardous waste under RCRA (40 CFR 261). However, it is strongly recommended that compound be treated as a hazardous waste and disposed of accordingly.

SARA Title III: Section 313 Toxic Chemical List (TCL): This product contains the following chemical(s) for routine annual toxic chemical release reporting under Section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Hydrogenated MDI- Percent in Composition: 10-30% by weight

Isophorone Diisocyanate- Percent in Composition: 1-5% by weight

TSCA Section 8(b) - Inventory Status: All chemical components of this product are in compliance with TSCA inventory requirements.

TSCA Section 12(b) - Export Notification: This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

State Regulations:

California Proposition 65: This product does not contain chemicals which are currently listed on the California list of Known Carcinogens and Reproductive Toxins.

Isophorone Diisocyanate (CAS # 4098-71-9) may be found on the Pennsylvania, New Jersey and the Massachusetts Right to Know Lists

Hydrogenated MDI (CAS # 5124-30-1) may be found on the Pennsylvania and New Jersey Right to Know Lists

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: General mechanical and local exhaust in accordance with ACGIH recommendations.

Respiratory Protection: If a person is concerned with exposure to isocyanates, an organic respirator can provide protection at less than the TLV. It is not a requirement at an exposure level less than the TLV. For exposures in excess of the TLV, an air supplied respirator would be required. Conditions that may create exposures above the TLV are spray applications, the material being strongly heated in excess of 125F before application, or the use of material in poorly ventilated areas.

Skin Protection: Wear impermeable gloves.

Eye Protection: Wear splash-proof chemical goggles.

Section 9 - Special Precautions and Comments

Handling and Storage

Signal Word: Danger!

Precautions: Corrosive- causes eye burns. Can cause skin irritation, allergic respiratory reaction and allergic skin reaction. Can be harmful if inhaled. Do not get in the eyes. Avoid breathing vapor or mists. Avoid contact with skin and clothing. Keep container closed when not in use. Use adequate ventilation. Wash thoroughly after handling.

DOT Transportation Data (49 CFR 172.101):

Shipping Name: isophorone diisocyanate mixture

Technical Shipping Name (If n.o.s.):

Hazard Class: 6.1

ID No.: UN 2290

Packing Group: PG III

Label: Toxic PG III

Packaging Authorizations

a) Exceptions:

b) Non-bulk Packaging: X

c) Bulk Packaging:

Quantity Limitations

a) Passenger, Aircraft, or Railcar:

b) Cargo Aircraft Only:

Vessel Stowage Requirements

a) Vessel Stowage:

b) Other:

Prepared By:

Revision Notes:

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