

Material Safety Data Sheet

Freeman 1050 Resin

Date of Preparation: November 30, 2007

Revision:

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Freeman 1050 Resin

Chemical Formula: Isocyanate

CAS Number: N/A

Other Designations: N/A

Intended Use or Product Type: Urethane 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

F 1

R 1

PPE†

†Sec. 8

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Corrosive - Causes eye burns. Can cause skin irritation, allergic respiratory reaction, and allergic skin reaction. Can be harmful if inhaled.

Section 2 - Composition / Information on Ingredients

Ingredient	CAS #	%
*Isophorone Diisocyanate	4098-71-9	5-15
*Hydrogenated MDI	5124-30-1	<5
*Cycloaliphatic diisocyanate prepolymer	119185-07-8	<85

* = OSHA Hazardous Ingredient

Ingredient	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
*Isophorone Diisocyanate	none estab.	0.02 ppm	0.005 ppm	none estab.
*Hydrogenated MDI	none estab.	none estab.	0.005 ppm	none estab.
*Cycloaliphatic diisocyanate prepolymer	none estab.	none estab.	none estab.	none estab.

Section 3 - Physical and Chemical Properties

Physical State: Liquid

Appearance and Odor: Clear, light amber, slight odor

Vapor Pressure: Not determined

Vapor Density (Air=1): > 1

Specific Gravity (H₂O=1, at 4 °C): 1.02 - 1.06

pH: Not determined

Water Solubility: Reacts with water

Boiling Point: Not determined

% Volatile: Negligible

Evaporation Rate: Not determined

VOC: 0.0004 lbs/gallon

Section 4 - Fire-Fighting Measures

Flash Point: >300 °F (>149 °C)

Flash Point Method: Estimated

LEL: Not established

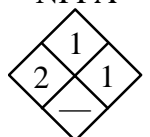
UEL: Not established

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

Unusual Fire or 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.

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities: Strong oxidizers, acids, and bases.

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

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

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

Emergency and First Aid Procedures

Inhalation: Remove to fresh air. Call a physician.

Eye Contact: Immediately flush with water for at least 15 minutes. Call a physician.

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

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

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

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: N/A

Toxicological Information:

Sensitization: May cause allergic skin reaction 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 Hazard 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 a 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 a toxic 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.

Isophorone Diisocyanate (CAS # 4098-71-9) 3-7 % by wt

Revision:

Freeman 1050 Resin

Hydrogenated MDI (CAS # 5124-30-1) 1-5 % by wt

TSCA Section 8(b) - Inventory Status: Chemical components listed on TSCA Inventory.

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:

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

Isophorone Diisocyanate (CAS # 4098-71-9) is on the New Jersey, Pennsylvania and Massachusetts 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 exposure 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.

Eye Protection: Wear splash-proof chemical goggles.

Skin Protection: Wear impermeable gloves.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Special Precautions and Comments

Handling and Storage

Signal Word: Warning!

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 eyes. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Isophorone diisocyanate mixture

Packaging Authorizations

Quantity Limitations

Hazard Class: 6.1

Non-bulk Packaging:

a) Passenger, Aircraft, or Railcar:

ID No.: UN 2290

Non-Bulk

b) Cargo Aircraft Only:

Packing Group: PG III

Vessel Stowage Requirements

Label: Toxic

a) Vessel Stowage:

b) Other:

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