

Material Safety Data Sheet

Freeman 1066 Resin

Date of Preparation: March 23, 2009

Revision:

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Freeman 1066 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

F 1

R 1

PPE[†]

[†]Sec. 8

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Causes irritation if inhaled and can cause skin irritation, eye irritation, allergic respiratory reaction, and allergic skin reaction. May be harmful if swallowed
Moisture Sensitive

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
*Hydrogenated MDI	5124-30-1	5-15
*Polyurethane prepolymer	68132-85-4	60-100

* = OSHA Hazardous Ingredient;

Ingredient	OSHA		ACGIH		Vapor Pressure
	PEL	STEL	TWA	STEL	
Hydrogenated MDI	none estab.	none estab.	0.005 ppm	none estab.	0.4 mmHg @ 302°F
Polyurethane prepolymer	none estab.	none estab.	none estab.	none estab.	NA

Section 3 - Physical and Chemical Properties

Physical State: Viscous liquid

Color: Clear to slightly hazy

Viscosity: 20,000 to 30,000 cps

Vapor Pressure: Not determined

Vapor Density (Air=1): Not determined

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

Water Solubility: Reacts with water

Boiling Point: Not determined

Evaporation Rate: Not determined

Percent Volatile: Negligible

pH: Not determined

Section 4 - Fire-Fighting Measures

Flash Point: >200 °F (>93 °C)

Flash Point Method: Estimated

LEL: Not established

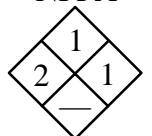
UEL: Not established

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

Unusual Fire or Explosion Hazards: Decomposition and combustion product 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.

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.

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

Skin Contact: 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

Spill /Leak Procedures: Remove spillage by absorbing in absorbent material.

Disposal: 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:

Acute Oral Effects (LD50): Component Hydrogenated MDI= 1065 mg/kg (rat)

Acute Inhalation Exposure Effects: Respiratory irritant.

Sensitization: May cause allergic skin reaction and respiratory sensitivity in some people.

Skin Irritation: Irritant.

Eye Irritation: Irritant.

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 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.

Chemical Name: Cyclohexane, 1,1'-Methylenebis(4-Isocyanato-

Common Name: Hydrogenated MDI

Percent in Composition: 8.876% by wt

Comment:

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

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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 any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

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

Section 8 - Exposure Controls / Personal Protection

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

Skin Protection: Wear impermeable gloves.

Respiratory Protection: Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

Eye Protection: Wear splash-proof chemical goggles.

Section 9 - Special Precautions and Comments

Handling and Storage:

Signal Word: Warning!

Precautions: Causes irritation if inhaled and can cause skin irritation, eye irritation, allergic respiratory reaction, and allergic skin reaction. May be harmful if swallowed. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

DOT Transportation Data (49 CFR 172.101):

DOT: Resin Compounds N.O. I

IATA Proper Shipping Name:

Aviation Regulated Liquid,
N.O.S.

Technical Shipping Name:

Dicyclohexylmethane diisocyanate

Hazard Class: 9

ID No.: UN 3334

Packing Group:

Label: Miscellaneous

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:**

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