

Material Safety Data Sheet

Freeman 1090Part A

Date of Preparation: June 18, 2009

Section 1 Chemical Product and Company Identification

Product/Chemical Name: Freeman 1090 Part A
Chemical Family: Isocyanate
CAS Number: N/A
Other Designations: N/A
General Use: N/A
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 1-800-424-9300

HMIS	
H	3
F	1
R	1
PPE Sec.8.	

Section 2 Composition/Information on Ingredients

Ingredient Name	CAS Number
Dicyclohexylmethane-4,4'-diisocyanate	5124-30-1

Ingredient	OSHA		ACGIH	
	PEL	STEL	TLV	STEL
Dicyclohexylmethane- 4,4'-diisocyanate	0.01 ppm	none estab.	0.005 ppm	none estab.

Section 3 Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Irritant, Sensitizer

Potential Health Effects

Primary Entry Routes: Skin; Inhalation and dermal

Acute Effects:

Inhalation: Irritates the respiratory tract

Eye: Causes irritation

Skin: Causes irritation

Ingestion: Swallowing can cause abdominal irritation, nausea, vomiting, and diarrhea.

Medical Conditions Aggravated by Long-Term Exposure: Persons with severe skin problems should avoid use.

Chronic Effects: Some individuals may become hypersensitized and react allergically with dermatitis or asthma when exposed to airborne levels below the exposure limits.

Carcinogenicity: IARC, NTP, and OSHA do not list any component as carcinogenic.

Section 4 First Aid Measures

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen and/or artificial respiration.

Eye Contact: Flush with plenty of water for 15 minutes and get medical attention.

Skin Contact: Wash thoroughly 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. Get medical attention.

Freeman 1090Part A Side

Section 5 Fire Fighting Measures

Flash Point: 369 °F (187 °C)

Flash Point Method: PMCC

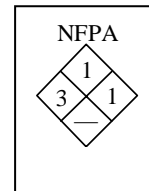
LEL: Not established

UEL: Not established

Extinguishing Media: Foam, water fog, CO₂, or dry chemical

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

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



Section 6 Accidental Release Measures

Spill /Leak Procedures: Stop spill at source. Dike area and contain. Clean up remainder with absorbent materials such as sand or vermiculite. Mop up and dispose of.

Section 7 Handling and Storage

Handling & Storage: Use with adequate ventilation. Avoid prolonged breathing of vapor. Avoid prolonged or repeated contact with skin. Wear safety goggles or face shield. Wear gloves, apron and footwear impervious to this material. Wash clothing before reuse. Store at ambient temperatures.. When resealing cans, use a nitrogen purge (Polyurethane Protectant). Keep container tightly closed and upright when not in use to prevent leakage.

Section 8 Exposure Controls/Personal Protection

Ventilation: Local exhaust recommended. General mechanical is acceptable. Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2).

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

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 Physical and Chemical Properties

Appearance and Odor: Clear, colorless, Liquid,
musty odor

Vapor Pressure: <0.001 @ 25°C

Vapor Density (Air=1): Not determined

Specific Gravity (H₂O=1, at 4 °C): 1.08

Water Solubility: Reacts with water

Boiling Point: Not determined

% Volatile: Nil

Evaporation Rate: Not Applicable

pH: Not Applicable

Section 10 Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization can occur.

Chemical Incompatibilities: Strong bases, water, amines, alcohols

Conditions to Avoid: Avoid contamination with water and other materials that react with Isocyanates. Avoid accidental mixing with polyols.

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, oxides of nitrogen, traces of HCN, MDI vapors.

Freeman 1090Part A Side

Section 11 Toxicological Information

Acute Inhalation Exposure Effects: Respiratory irritant.

Skin : Irritant.

Eye: Irritant.

Carcinogenicity: IARC, NTP, and OSHA do not list any components as carcinogens.

Section 12 Ecological Information

No Known evidence of adverse effects from available information

Section 13 Disposal Considerations

Disposal: Use safety containers for disposal. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations

Section 14 Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Liquid Plastic N.O.I., Non-Regulated

Section 15 Regulatory Information

US Federal Regulations:

OSHA (Occupational Safety and Health Act): This Material Safety Data Sheet 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.

RCRA (Resource Conservation and Recovery Act): Not a hazardous waste under RCRA (40 CFR 261).

SARA 311/312 Codes: Acute Health, Fire.

SARA Toxic Chemical (40 CFR 372.65): This product contains the following toxic chemical subject to the reporting requirements of Section 313 of SARA Title III of 1986 and of 40 CFR 372.

Dicyclohexylmethane-4,4'-diisocyanate (CAS # 5124-30-1) 85% Max

TSCA Inventory Status: All ingredients listed on TSCA inventory requirements.

State Regulations:

Diclohexylmethane-4,4'-diisocyanate (CAS # 5124-30-1) may be found on both the New Jersey and the Pennsylvania Right to Know lists.

Section 16 Other Information

Disclaimer: The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

Material Safety Data Sheet

Freeman 1090 Part B

Date of Preparation: October 25, 2010

Section 1 Chemical Product and Company Identification

Product/Chemical Name: Freeman 1090 Part B

Chemical Family: Polyol

CAS Number: N/A

Other Designations: N/A

General Use: N/A

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 1-800-424-9300

HMIS	
H	2
F	1
R	1
PPE Sec.8.	

Section 2 Composition/Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Urethane Polyol	Proprietary	95-100
Phenylmercuric neodecanoate	26545-49-3	0.4

Ingredient	OSHA		ACGIH	
	PEL	STEL	TLV	STEL
Urethane Polyol	none estab.	none estab.	none estab.	none estab.
Phenylmercuric neodecanoate	0.01mg/m ³	none estab.	0.01mg/m ³	none estab.

Section 3 Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Causes eye, skin, and respiratory irritations.

Potential Health Effects

Primary Entry Routes: Skin; Inhalation from heated vapors.

Acute Effects:

Inhalation: Irritates the respiratory tract

Eye: Causes irritation

Skin: Causes irritation

Ingestion: Effect are unknown

Medical Conditions Aggravated by Long-Term Exposure: Persons with severe skin problems should avoid use.

Chronic Effects: This product contains an organo-mercury catalyst below the reportable level required by OSHA 1910.1200; however, due to the chronic toxicity of organo-mercury compounds careful handling of this product is required.

Carcinogenicity: IARC, NTP, and OSHA do not list any components of this product as a carcinogen.

Section 4 First Aid Measures

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen and/or artificial respiration.

Eye Contact: Flush with plenty of water for 15 minutes and get medical attention.

Skin Contact: Wash thoroughly 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. Get medical attention.

Freeman 1090 Part B Side

Section 5 Fire Fighting Measures

Flash Point: >365°F (>185 °C)

Flash Point Method: TCC

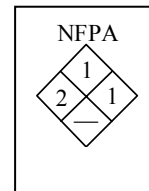
LEL: Not established

UEL: Not established

Extinguishing Media: Foam, water fog, CO₂, or dry chemical

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

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



Section 6 Accidental Release Measures

Spill /Leak Procedures: Stop spill at source. Dike area and contain. Clean up remainder with absorbent materials such as sand or vermiculite. Mop up and dispose of.

Section 7 Handling and Storage

Handling & Storage: Use with adequate ventilation. Avoid prolonged breathing of vapor. Avoid prolonged or repeated contact with skin. Wear safety goggles or face shield. Wear gloves, apron and footwear impervious to this material. Wash clothing before reuse. Store at ambient temperatures.. When resealing cans, use a nitrogen purge (Polyurethane Protectant). Keep container tightly closed and upright when not in use to prevent leakage.

Section 8 Exposure Controls/Personal Protection

Ventilation: Local exhaust recommended. General mechanical is acceptable. Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2).

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

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 Physical and Chemical Properties

Appearance and Odor: Clear colorless, liquid, mild odor

Vapor Pressure: Not determined

Vapor Density (Air=1): Not determined

Specific Gravity (H₂O=1, at 4 °C): 1.03

Water Solubility: Slight

Boiling Point: Not determined

% Volatile: Nil

Evaporation Rate: Not determined

Section 10 Stability and Reactivity

Stability: Stable.

Conditions to Avoid: Contamination with materials containing active NCO compounds, excessive heat for prolonged period.

Chemical Incompatibilities: Strong oxidizing agents, acids, metal-organic compounds.

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

Hazardous Polymerization: Will not occur. Avoid inadvertent mixture of A and B parts.

Freeman 1090 Part B Side

Section 11 Toxicological Information

Acute Inhalation Exposure Effects: Respiratory irritant.

Skin Irritation: Irritant.

Eye Irritation: Irritant.

Carcinogenicity: IARC, NTP, and OSHA do not list any components of this product as a carcinogen.

Section 12 Ecological Information

No Known evidence of adverse effects from available information

Section 13 Disposal Considerations

Disposal: Use safety containers for disposal. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations

Section 14 Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Liquid Plastic, N.O.I., Non-Regulated

Section 15 Regulatory Information

US Federal Regulations:

OSHA (Occupational Safety and Health Act): This Material Safety Data Sheet 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.

RCRA (Resource Conservation and Recovery Act): Not a hazardous waste under RCRA (40 CFR 261).

SARA 311/312 Codes:

SARA Toxic Chemical (40 CFR 372.65): This product contains the following toxic chemical subject to the reporting requirements of Section 313 of SARA Title III of 1986 and of 40 CFR 372.

<u>Components That Require Reporting</u>	<u>RQ</u>	<u>% of Reportable Component</u>
Mercury (as part of catalyst)	1 lb.	0.37

TSCA Inventory Status: All ingredients listed on TSCA inventory requirements.

State Regulations:

CA Proposition: Contains an organomercury compound which is a developmental hazard

May contain trace amounts of Phenylmercuric neodecanoate (26545-49-3) which is on the Pennsylvania, Right to Know list

Section 16 Other Information

Disclaimer: The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.