

Material Safety Data Sheet

Freeman 90-1 Aluminum Mold-Seal Coating

Date of Preparation: March 9, 2009

Revision:

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Freeman 90-1 Aluminum Mold-Seal Coating

Chemical Family: N/A

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 800-424-9300.

HMIS

H 2

F 3

R 0

PPE†

†Sec. 8

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Flammable, Irritant, Inhalation

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Amyl Acetate	628-63-7	10-20
Anhyd. Isopropyl Alcohol	67-63-0	10-20
VM&P Naphtha	64742-89-8	10-20
Toluene*	108-88-3	<10
Methyl Ethyl Ketone *	78-93-3	< 10
Isobutyl Alcohol	78-83-1	<10
Mineral Spirits 66	8052-41-3	< 5
Ethylene Glycol Monobutyl Ether	111-76-2	< 5
Methyl Isobutyl Ketone *	108-10-1	< 5
Xylene	1330-20-7	< 1
Ethyl Benzene	100-41-4	<1

* Indicates toxic chemicals subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372. 65

Ingredient	OSHA		ACGIH		Vapor Pressure	
	PEL	STEL	TLV	STEL	MmHg	@ Temp°F
Amyl Acetate	100 ppm	none estab.	100 ppm	none estab.	4	68
Anhyd. Isopropyl Alcohol	400 ppm	none estab.	400 ppm	none estab.	33	68
VM&P Naphtha	300 ppm	none estab.	300 ppm	none estab.	10.2	68
Toluene	100 ppm	none estab.	50 ppm	none estab.	26	68
Methyl Ethyl Ketone	200 ppm	none estab.	200 ppm	none estab.	78	68
Isobutyl Alcohol	100 ppm	none estab.	50 ppm	none estab.	8.8	68
Mineral Spirits 66	100 ppm	none estab.	100 ppm	none estab.	2	68
Ethylene Glycol Monobutyl Ether	25 ppm	none estab.	25 ppm	none estab.	0.66	68
Methyl Isobutyl Ketone	100 ppm	none estab.	50 ppm	none estab.	16	68
Xylene	100 ppm	none estab.	50 ppm	none estab.	14.2	100
Ethyl Benzene	100 ppm	none estab.	100 ppm	none estab.	7.1	68

Section 3 - Physical and Chemical Properties

Appearance and Odor: Aluminum liquid, Strong solvent odor

Coating VOC: 5.13 lb/gal

Material VOC: 5.13 lb/gal

Specific Gravity (H₂O=1, at 4 °C): 0.94

Water Solubility: Negligible

Boiling Range: 175 °F- 336 °F

Evaporation Rate: Slower than ether

Vapor Density (Air=1): Heavier than air.

Section 4 - Fire-Fighting Measures

Flash Point: 23 °F (-5°C)

Flash Point Method: TCC

LEL: 0.9% by volume

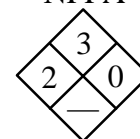
UEL: 20% by volume

Extinguishing Media: Foam, CO₂, dry chemical

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. Do not apply to hot surfaces.

Fire-Fighting Instructions: Water spray may be ineffective. Use fog nozzles. Cool fire exposed containers with water.

NFPA



Section 5 - Stability and Reactivity

Stability: Stable under recommended handling and storage conditions.

Conditions to Avoid: High temperatures, flames

Incompatibility (Materials to Avoid): N/A

Hazardous Decomposition Products: May produce hazardous fumes when heated. Carbon monoxide, oxides of nitrogen.

Hazardous Polymerization: Will not occur.

Section 6 - Health Hazard Information

Potential Health Effects

Inhalation: Anesthetic. Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness, or coma.

Skin and Eye Contact: Primary irritation.

Skin: Prolonged or repeated exposure to this material may cause redness and burning, during, and cracking of the skin and dermatitis. Person with pre-existing skin disorders may be more susceptible.

Ingestion: Do not induce vomiting. Consult a physician or poison control center.

Health Hazards (Acute and Chronic): Pre-existing heart disorders may be aggravated by exposure to this material.

Caution: Toluene - may be harmful to the fetus based on laboratory animal studies.

Carcinogenicity: Contains very low levels of Benzene as an impurity either of Toluene or Xylene. Our MSDS on the products indicate the specific solvents present. Benzene, toluene, xylene and ethyl benzene are classified by the State of California as cancer hazards.

Medical Conditions Aggravated by Long-Term Exposure: Any medical condition, allergy, or sensitization can become worse upon exposure.

Emergency and First Aid Procedures

Inhalation: Remove from exposure. Restore breathing. Keep warm and quiet. Notify a physician.

Eyes: Flush immediately with large amounts of water for 15 minutes. See a physician.

Skin: Wash affected areas thoroughly with soap and water. Remove contaminated clothing.

Ingestion: Do not induce vomiting. Consult a physician or poison control center.

Section 7 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures: Remove all sources of ignition. Ventilate area. Remove with inert absorbent and non-sparking tools.

Disposal: Disposal in accordance with local, state, and federal regulation. Incinerate in approved facility. Do not incinerate closed containers. Emptied containers may retain hazardous residue and explosive vapors. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

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State Regulations:

California Proposition 65: Contains - Benzene, toluene, xylene and ethyl benzene

Materials on the New Jersey Right to Know List: Amyl acetate, methyl isobutyl ketone, isopropyl alcohol, methyl ethyl ketone, toluene; isobutyl alcohol, xylene, and ethyl benzene

Materials on the Pennsylvania Right to Know List: Amyl acetate, methyl isobutyl ketone, isopropyl alcohol, methyl ethyl ketone, toluene; isobutyl alcohol, xylene and ethyl benzene

Materials on the Massachusetts Right to Know List: Amyl acetate, methyl isobutyl ketone, isopropyl alcohol, methyl ethyl ketone, toluene; isobutyl alcohol, xylene and ethyl benzene

Regulatory Information:

TSCA Inventory Status: All ingredients listed on TSCA Inventory.

Section 8 - Exposure Controls / Personal Protection

Ventilation: In restricted ventilation areas use Bureau of Mines approved chemical mechanical filters designed to remove a combination of particulate and gas/vapor. In confined areas use Bureau of Mines approved air line type respirator.

Respiratory Protection: In outdoor or open areas use Bureau of Mines approved mechanical filter respirator to remove solid air borne particles of overspray during spray application.

Protective Gloves: Wear resistant gloves such as: Natural rubber, or neoprene.

Eye Protection: Chemical splash goggles in compliance with OSHA regulation.

Other Protective Clothing or Equipment: To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Work/Hygienic Practices: Wash hands before eating or using the washrooms, smoke in smoking areas only.

Section 9 - Special Precautions and Comments

Handling and Storage:

Handling Precautions: Ground containers when pouring. Avoid free fall of liquid in excess of a few inches. Do not flame cut, braze or weld.

Storage Requirements: Do not store above 120°F. Store large quantities in building designed and protected for storage of NFPA Class Liquids.

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Paint

Shipping Symbols:

Hazard Class: 3

ID No.: UN 1263

Packing Group: II

Label: Flammable Liquid

Special Provisions (172.102):

Packaging Authorizations

a) Exceptions:

b) Non-bulk Packaging:

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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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.