

Material Safety Data Sheet

Freeman 90-1 Thinner

Date of Preparation: January 3, 2007

Revision:

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Freeman 90-1 Thinner

Chemical Formula: Mixture

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

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†Sec. 8

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Flammable, Irritant, Inhalation

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Anhyd. Isopropyl Alcohol	67-63-0	50 – 60
n-Butyl Acetate	123-86-4	20 – 30
VM & P Naphtha	64742-89-8	10 – 15
Methyl Isobutyl Ketone	108-10-1	3-5
Xylene	1330-20-7	1 - 2
Ethyl Benzene	110-41-4	<1

Ingredient	OSHA		ACGIH		Vapor Pressure	
	PEL	STEL	TLV	STEL	MmHg	@Temp°F
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
n-Butyl Acetate	150 ppm	none estab.	150 ppm	200 ppm	8	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: Colorless mobile liquid, solvent odor.

Vapor Pressure: 22 mm Hg @ 68 °F

Vapor Density (Air=1): 2.9 (Estimate)

Specific Gravity (H₂O=1, at 4 °C): 0.81

Water Solubility: Moderate

Boiling Point: 180°F

Freezing/Melting Point: N/A

Evaporation Rate: (N-Butyl Acetate = 1): 1.0

Coating V.O.C.: 100% 6.70 lb/gal

Section 4 - Fire-Fighting Measures

Flash Point: 53 °F (-5°C)

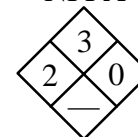
Flash Point Method: TCC

LEL: 1.0 % v/v

UEL: 12.0 % v/v

Extinguishing Media: Use water fog, "alcohol" foam, dry chemical or CO₂.

NFPA



Special Fire-Fighting Procedures and Precautions: Warning. Flammable. Clear the area of unprotected personnel. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

Unusual Fire and Explosion Hazards: Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

Section 5 - Stability and Reactivity

Stability: Stable.

Conditions and Materials to Avoid: Avoid heat, sparks, flame and contact with strong oxidizing agents. Do not store or handle in aluminum equipment at temperatures above 120 °F.

Hazardous Decomposition Products: Carbon monoxide and unidentified organic compounds may be formed during combustion.

Section 6 - Health Hazard Information

Potential Health Effects

Eye Contact: Liquid is slightly to severely irritating to the eyes. Vapors are also irritating.

Skin Contact: Liquid is slightly to moderately irritating to skin. Prolonged or repeated liquid contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis.

Inhalation: Vapors may be irritating to nose, throat and respiratory tract. High vapor concentrations may cause central nervous system (CNS) depression.

Ingestion: Irritating to the gastrointestinal tract, causing abdominal pain and vomiting, sometimes bloody. Ingestion may cause CNS depression, low blood pressure, rapid heart beat and liver damage.

Signs and Symptoms: Irritation as noted above. Early to moderate CNS (Central Nervous System) depression may be evidenced by giddiness, headache, dizziness and nausea; In extreme cases, unconsciousness, respiratory depression and death may occur. Liver damage may be evidenced by loss of appetite, jaundice (yellowish skin color) and sometimes pain in the upper abdomen on the right side.

Medical Conditions Aggravated by Long-Term Exposure: Preexisting eye, skin, respiratory disorders may be aggravated by exposure to this product. Impaired function from preexisting disorders may be aggravated by exposure to this product. See the following Supplemental Health Information.

Emergency and First Aid Procedures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

Skin Contact: Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Get artificial respiration if not breathing. Get medical attention.

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

Section 7 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures: Warning. Flammable. Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. ***Small Spills*** take up with an absorbent material and place in non-leaking containers; seal tightly for proper disposal.

Disposal: Dispose 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.

State Regulatory Information: California Proposition 65: Contains - Benzene, xylene and ethyl benzene

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

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

Materials on the Massachusetts Right to Know List: isopropyl alcohol, methyl isopropyl ketone, xylene and ethyl benzene

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Regulatory Information:

TSCA Inventory Status: All ingredients listed on TSCA Inventory.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use explosion-proof ventilation as required to control vapor concentrations.

Respiratory Protection: Avoid prolonged or repeated breathing of vapors. If exposure may or does exceed occupational exposure limits (Section 2) use a NIOSH-approved respirator to prevent overexposure. In accord with 29 CFR 1910, 134 use either a full-face, atmosphere-supplying respirator or air-purifying respirator for organic vapors.

Protective Clothing: Avoid contact with eyes. Wear chemical goggles if there is likelihood of contact with eyes. Avoid prolonged or repeated contact with skin. Wear chemical-resistant gloves and other clothing as required to minimize contact. Test data from published literature and/or glove and clothing and manufacturers indicate the best protection is provided by nitrile, neoprene and natural rubber gloves.

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

Section 9 - Special Precautions and Comments

Precautions to be Taken in Handling and Storage: Do not store above 120°F. Store large quantities in building designed and protected for storage of NFPA class Liquids. Ground containers when pouring. Avoid free fall of liquid in excess of a few inches. Do not flame cut, braze, or weld.

Special Precautions: Keep liquid and vapor away from heat, sparks and flame. Surfaces that are sufficiently hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.

Vapors may accumulate and travel to ignition sources distant from the handling site; flash-fire can result. Keep containers closed when not in use. Use with adequate ventilation; containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize drum containers to empty them. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment.

Wash with soap and water before eating, drinking, smoking or using toilet facilities. Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well ventilated area before laundering.

Do not store or handle in aluminum equipment at temperatures above 120 °F.

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Flammable
Liquid 3 Paint Related Material
Shipping Symbols:
Hazard Class: 3
ID No.: UN 1263
Packing Group: II

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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