

Material Safety Data Sheet

Freeman Pitch Solvent

Date of Preparation: January 3, 2007

Revision:

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Freeman Pitch Solvent

Chemical Family: Aromatic solvent

CAS Number: Mixture

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

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☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Flammable, Inhalation

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Xylene (Mixed Isomers)	1330-20-7	80-90
Ethyl Benzene	100-41-4	10-20

Ingredient	OSHA PEL		ACGIH TLV		Vapor Pressure
	TWA	STEL	TWA	STEL	
Xylene (Mixed Isomers)	100 ppm	150 ppm	100 ppm	150 ppm	18 mmHg @ 100°F
Ethyl Benzene	100 ppm	125 ppm	100 ppm	125 ppm	19 mmHg @ 100°F

Section 3 - Physical and Chemical Properties

Physical State: Liquid

Appearance and Odor: Colorless liquid, aromatic hydrocarbon odor

Viscosity of Liquid: 0.7 cSt at 77°F Approximate

Vapor Pressure: 14.2 mm Hg at 100 °F

Specific Gravity (H₂O=1, at 60 °F): 0.87

Vapor Density (Air=1): 3.7

Specific Gravity of Vapor, at 1 atm (air=1): 3.70
(calculated)

Water Solubility: 0.87% at 77 °F

Boiling Point: 282 - 286°F

Freezing/Melting Point: -31°F

Evaporation Rate: (n-butyl acetate=1): 0.8 Approximate

Section 4 - Fire-Fighting Measures

Flash Point: 78 °F (25.6 °C)

Flash Point Method: Tagliabue Closed Cup

Autoignition Temperature: 932 °F (approximate)

LEL: 1.9 % volume

UEL: 12.3 % volume

Flammability Classification: Flammable

Extinguishing Media: Use water fog, dry chemical or carbon dioxide to extinguish flames. Do not use a direct stream of water. Material will float and can be re-ignited on surface of water.



General Hazard: Flammable liquid, can release vapors that form flammable mixtures at temperatures at or above the flashpoint. Toxic gases will form upon combustion. Static discharge; material can accumulate static charges which can cause an incendiary electrical discharge. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous.

DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly banded and promptly returned to a drum reconditioner, or properly disposed of.

Decomposition Products Under Fire Conditions: Fumes, smoke, and carbon monoxide.

Fire-Fighting: Use water spray to cool fire exposed surfaces and to protect personnel. Shut off “fuel” to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Use foam or dry chemical to extinguish fire. Respiratory and eye protection required for fire fighting personnel. Avoid spraying water directly into storage containers due to danger of boilover. This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

Section 5 - Stability and Reactivity

Stability: Stable

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities: Strong oxidizers, concentrated nitric and sulphuric acids, halogen, and molten sulfur.

Conditions to Avoid: Prevent vapor accumulation. Avoid heat, sparks, open flames and other ignition sources.

Hazardous Decomposition Products: None

Section 6 - Health Hazard Information

Potential Health Effects

Eye Contact: Irritating, but does not injure eye tissue.

Skin Contact: Frequent or prolonged contact may irritate. Low order of toxicity. Occasional brief contact with the liquid will not result in significant irritation unless evaporation is impeded. Skin contact may aggravate an existing dermatitis condition.

Inhalation: High vapor/aerosol concentrations are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. Negligible hazard at ambient temperature (-18 to 38 °C; 0 to 100 °F).

Ingestion: Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. Low order of toxicity.

Chronic Effects: This product contains ethylbenzene. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

Emergency and First Aid Procedures

Eye Contact: Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

Skin Contact: Flush with large amounts of water; use soap if available. Remove grossly contaminated clothing, including shoes, and launder before reuse.

Inhalation: Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

Ingestion: If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

Section 7 - Spill, Leak, and Disposal Procedures

Land Spill: Eliminate sources of ignition. Prevent additional discharge of material if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see **Regulatory Information**) notify the National Response Center. Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible material such as sawdust. Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent. **Disposal:** Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

Water Spill: Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters. **Disposal:** Consult an expert on disposal of recovered material and ensure conformity to local disposal considerations.

Toxicological Information: Please refer to Section 6 for available information on potential health effects.

Ecological Information: No specific ecological data are available for this product. Please refer to Section 7 for information regarding accidental release and Section for regulatory reporting information.

Regulatory Information

TSCA:

Components of this product are listed on the TSCA Inventory.

Clean Water Act / Oil Pollution Act:

This product is classified as an oil under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Act of 1990. Discharge or spills which produce a visible sheen on either surface water, or in waterways/ sewers which lead to surface water, must be reported to the National Response Center at 800-424-8802.

CERCLA:

If the reportable quantity of this product is accidentally spilled, the incident is subject to the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and must be reported to the National Response Center by calling 800-424-8802.

The reportable spill quantity of this product is 118 pounds.

This product contains: Xylene, Ethylbenzene.

SARA TITLE III:

Under the provisions of Title III, Sections 311/312 of the Superfund Amendment and Reauthorization Act, this product is classified into the following hazard categories: Immediate Health, Delayed Health, Fire.

This information may be subject to the provisions of the Community Right-to-Know Reporting Requirements (40 CFR 370) if threshold quantity criteria are met.

This product contains the following Section 313 Reportable ingredients:

<u>COMPONENT</u>	<u>CAS No.</u>	<u>MAXIMUM %</u>
Xylene	1330-20-7	85.0
Ethyl Benzene	100-41-4	15.0

State Regulations:

California Proposition 65: The following is required composition information. This product contains ethyl benzene which is on the list as a carcinogen.

Xylenes, mixed isomers (CAS # 1330-20-7) is found on the New Jersey, Pennsylvania and Massachusetts Right to Know Lists

Ethyl Benzene, (CAS # 100-41-4) is found on the New Jersey, Pennsylvania and Massachusetts Right to Know Lists

Section 8 - Exposure Controls / Personal Protection

Exposure Controls: The use of local exhaust ventilation is recommended to control process emissions near the source.

Laboratory samples should be handled in a lab hood. Provide mechanical ventilation of confined spaces. See respiratory protection recommendations. Use explosion-proof ventilation equipment.

Personal Protection: For open systems where contact is likely, wear safety glasses with side shields, long sleeves, and chemical resistant gloves. Where contact may occur, wear safety glasses with side shields. Where concentrations in air may exceed the limits given in Section 2 and engineering, work practice or other means of exposure reduction are not adequate, NIOSH approved respirators may be necessary to prevent overexposure by inhalation.

Respiratory Protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29CFR 1910.134.

Types of respirator(s) to be considered in the selection process include: Air-Purifying Respirator for Organic Vapors, Supplied-Air Respirator, Self-contained breathing apparatus (SCBA) – for use in environments with unknown concentrations or emergency situations.

Section 9 - Special Precautions and Comments

Storage and Handling

Electrostatic Accumulation Hazard: Yes, use proper bonding and/or grounding procedure

Storage Temperature, °F: Ambient

Loading/Unloading Temperature, °F: Ambient

Storage and Handling: Keep container closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. Do NOT handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Do NOT pressurize, cut, heat, or weld containers. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning.

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Flammable Liquids, N.O.S., (Xylene, Ethylbenzene)
Hazard Class: 3
ID No.: UN 1993
Packing Group: III

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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