

**Section 1 Identification**

**Product identifiers**

Product name: Freeman 90-1 Fre-Thin

**Relevant identified uses of the substance or mixture and uses advised against**

Identified uses: Lacquer Thinner

**Details of the supplier of the safety data sheet:**

Freeman Manufacturing and Supply Company  
 1101 Moore Road, Avon, OH 44011  
 Phone (440) 934-1902  
 FAX (440) 934-7200

HMIS	
H	2
F	3
R	0
PPE	
Sec. 8	

**24 Hour Emergency Phone Number: (800) 424-9300 CHEMTREC**

**Section 2 Hazards Identification**

**GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)**

Flammable Liquid, Category 2  
 Skin Corrosion/Irritation, Category 3  
 Mutagen, Category 1B  
 Carcinogen, Category 1B  
 Reproductive Toxin, Category 1A  
 Aspiration Hazard, Category 1

**GHS Label elements**



**Signal word**

**Danger**

**Hazard statements**

Highly flammable liquid and vapor  
 May be fatal if swallowed and enters airways  
 Causes mild skin irritation  
 May cause genetic defects  
 May cause cancer  
 May damage fertility or the unborn child

**Precautionary statements**

**Prevention**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Keep container tightly closed when not in use.  
 Ground/bond container and receiving equipment.  
 Do not breathe fumes or vapors.

**Section 2 Hazards Identification** continued

Wash skin thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Use only in a well-ventilated area.  
 Avoid release to the environment.  
 Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

If on skin: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
 If inhaled: Remove person to fresh air and call doctor/physician if not feeling well.  
 If in eyes: Rinse continuously with water for at least 15 minutes.  
 Remove contact lenses, if present and easy to do.  
 Do NOT induce vomiting.  
 If swallowed, immediately call a poison control center or a physician.  
 If skin irritation occurs: Get medical advice/attention.  
 If eye irritation persists: Get medical advice/attention.  
 Take off contaminated clothing and wash before reuse.  
 In case of fire, use alcohol resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>) or dry sand to extinguish.

**Storage**

Store in a well-ventilated place. Keep cool.

**Disposal**

Dispose of contents and container to an appropriate waste site in accordance with local and national regulations.

**Hazards not otherwise classified (HNOC) or not covered by GHS**

None known

**Section 3 Composition/Information on Ingredients**

Ingredient Name	CAS Number	Weight Concentration %
n-Butyl Acetate	123-86-4	20.00 – 30.00
Naphtha, petroleum, hydrotreated light	64742-49-0	10.00 – 20.00
4 Methyl-2-Pentanone	108-10-1	5.00 – 10.00
Xylenes (o-, m-, p-isomers)	1330-20-7	1.00 – 5.00
Ethylbenzene	100-41-4	0.10 – 1.00

**Section 4 First Aid Measures**

**Description of first aid measures**

**If inhaled**

Move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact**

Wash off with soap and plenty of water. If skin irritation continues, consult a doctor.

**In case of eye contact**

Remove contact lenses, if worn. Flush opened eyes thoroughly with water. If irritation persists, get medical assistance.

**Section 4 First Aid Measures** continued

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Do not induce vomiting.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

**Indication of any immediate medical attention and special treatment needed**

No data available.

**Section 5 Fire-Fighting Measures**

**Extinguishing media**

Suitable extinguishing media: Use alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating and in case of fire.

**Hazardous Combustion Products**

Carbon oxides. Can form explosive vapor-air mixtures. Vapors are heavier than air and may spread along floors. Vapors may travel considerable distance to source of ignition and flash back.

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Section 6 Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

Avoid breathing vapors, mist or gas.  
Remove all sources of ignition.  
Ensure adequate ventilation.  
Remove all non-essential people from the area.  
For personal protection see section 8.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Absorb with liquid binding material.  
Sweep up and shovel, using non-sparking tools.  
Keep in suitable, closed containers for disposal.

**Section 7 Handling and Storage**

**Precautions for safe handling**

Use normal precautions when handling flammable materials. Do not breathe fumes or vapor. Do not allow material to contact skin.  
Provide appropriate exhaust ventilation.

**Conditions for safe storage, including any incompatibilities**

Store at ambient temperatures in closed containers. Storage temperature 10-50°C. Protect from humidity and water. This material can catch fire if overheated. Do not heat this material above the flash point. Keep away from flame and open electrical coils. Do not store with oxidizing or acidic materials.

**Section 8 Exposure Controls/Personal Protection**

**Components with workplace control parameters**

Ingredient	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
n-Butyl Acetate	150 ppm	None estab.	150 ppm	200 ppm
4-Methyl-2-Pentanone	100 ppm	None estab.	20 ppm	75 ppm
Xylene	100 ppm	None estab.	100 ppm	150 ppm
Ethylbenzene	100 ppm	None estab.	20 ppm	125 ppm

**Exposure controls**

**Appropriate engineering controls**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. An eye wash station and safety shower should be located near the workstation.

**Personal protective equipment**

**Eye/face protection**

With product at ambient temperatures, use safety glasses equipped with side shields.

**Skin protection**

**Hand Protection**

With product at ambient temperatures, use disposable nitrile gloves. Contaminated gloves should be replaced.

**Body Protection**

Prevent skin contact when handling material.

**Respiratory Protection**

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

**Safety Stations**

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

**General Hygienic Practices**

Avoid breathing vapor or mist. Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Clear Liquid
<b>Odor</b>	Solvent
<b>Odor Threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting Point</b>	No data available
<b>VOC Content</b>	5.1 lb./gal.
<b>Boiling range</b>	114°C (237°F)
<b>Flash Point (COC)</b>	10°C (50°F)
<b>Evaporation rate</b>	No data available

**Section 9 Physical and Chemical Properties** continued

<b>Flammability (solid, gas)</b>	No data available
<b>Upper/lower flammability</b>	No data available
<b>Vapor Pressure</b>	9.7 mmHg
<b>Vapor density</b>	4.0
<b>Relative density (g/cc)</b>	0.804
<b>Water Solubility</b>	Negligible
<b>Coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	425°C (797°F)
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No data available
<b>Oxidizing Properties</b>	No data available
<b>% Volatile</b>	6.7 lb./gal. (100%)

**Section 10 Stability and Reactivity**

<b>Reactivity</b>	No data available
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	None.
<b>Conditions to avoid</b>	Heat and open flames.
<b>Incompatible materials</b>	Oxidizing agents, peroxides
<b>Hazardous decomposition</b>	Thermal oxidative decomposition can produce carbon monoxide and carbon dioxide.

**Section 11 Toxicological Information**

**Information on toxicological effects**

<b>Acute Oral toxicity</b>	No data available
<b>Acute Inhalation toxicity</b>	LC 50 141 mg/L (mixture)
<b>Acute Dermal toxicity</b>	No data available
<b>Respiratory or skin sensitization</b>	Not a skin sensitizer
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	
<b>IARC</b>	Ethylbenzene and 4-Methyl-2-Pentanone are considered class 2B suspect human carcinogen.
<b>ACGIH</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen
<b>NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity</b>	
- single exposure	No data available
<b>Specific target organ toxicity</b>	
- repeated exposure	Eyes, kidneys, liver, central nervous system, skin, respiratory system

**Section 12 Ecological Information**

<b>Toxicity</b>	No data available
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT &amp; vPvB assessment</b>	No data available

**Section 13 Disposal Considerations**

**Disposal**

The product should not be allowed to enter drains, water courses, or the soil. Use safety containers for disposal. Contact a licensed waste management company for detailed recommendations. Follow applicable Federal, state, and local regulations.

**Section 14 Transport Information**

**DOT: Shipping Name:** Paint Related Material  
**Hazard Class:** 3  
**ID No.:** UN 1263  
**Packing Group:** II

**IATA: Shipping Name:** Paint Related Material  
**Hazard Class:** 3  
**ID No.:** UN 1263  
**Packing Group:** II

**IMDG: Shipping Name:** Paint Related Material  
**Hazard Class:** 3  
**ID No.:** UN 1263  
**Packing Group:** II

**Section 15 Regulatory Information**

**US Federal Regulations**

RCRA Hazardous Waste Number (40 CFR 261.33): Not listed  
 RCRA Hazardous Waste Classification (40 CFR 261): Not classified  
 CERCLA Hazardous Substance (40 CFR 302.4): Listed/unlisted specific per RCRA Sec. 3001  
 SARA 311/312 Codes: Chronic Health Hazard, Fire Hazard  
 SARA Toxic Chemical (40 CFR 372.65): Not listed  
 TSCA Inventory Status: All ingredients listed on TSCA inventory requirements

**US State Regulations**

California Proposition 65



WARNING: This product can expose you to chemicals including 4-Methyl-2-Pentanone and Ethylbenzene, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Section 16 Other Information**

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