Section 1 Identification

Product identifiers

Product name: Freeman 90-1 Red Pattern Coating

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

Identified uses: Pattern Coating
Industrial Use Only

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

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

Section 2 Hazards Identification

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

Flammable Liquid, Category 1
Skin Corrosive, Category 2
Eye Corrosive, Category 2A
Mutagen, Category 1B
Carcinogen, Category 1B
Reproductive Toxin, Category 1A
Aspiration Hazard, Category 1

GHS Label elements

Signal word **Danger**

Hazard statements

Extremely flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious eye 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.

Section 2 Hazards Identification continued

Ground/bond container and receiving equipment.
Do not breathe fumes or vapors.
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_2) 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.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Weight Concentration %
Proprietary alkyd resin	N/A	10.00 – 20.00
Isopropyl alcohol	67-63-0	10.00 – 20.00
n-Amyl acetate	628-63-7	10.00 – 20.00
Xylenes (o-, m-, p-isomers)	1330-20-7	10.00 – 20.00
Nitrocellulose	9004-70-0	10.00 – 20.00
Methyl ethyl ketone	78-93-3	5.00 - 10.00
Toluene	108-88-3	5.00 – 10.00
2-Methylbutyl acetate	624-41-9	5.00 – 10.00
Naphtha, petroleum, hydrotreated light	64742-49-0	1.00 – 5.00
Ethylbenzene	100-41-4	1.00 – 5.00
1-Naphthalenesulfonic acid, 2-[(2-hydroxy-1-naphthalenyl) azo]-, barium salt (2:1)	1103-38-4	1.00 – 5.00
Diisononyl phthalate	28553-12-0	1.00 – 5.00
2-Butoxyethanol	111-76-2	1.00 – 5.00
2-Pentanone, 4-methyl	108-10-1	1.00 – 5.00
Isopropyl acetate	108-21-4	1.00 – 5.00

Section 4 First Aid Measures

If inhaled
Move person into fresh air. If not breathing, give artificial respiration.
Consult doctor if symptoms persist.
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 for several minutes. If irritation persists, get medical assistance.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Do not induce vomiting. Call for medical help immediately.
Note to physician
Treat symptomatically

Section 5 Fire-Fighting Measures

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. Mixture in sealed and heated containers may cause explosion hazard.
Hazardous combustion products
Carbon oxides, metal oxides, nitrogen 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
Do not breathe vapors.
Avoid contact with skin, eyes and clothing
Remove all sources of ignition.
Ensure adequate ventilation.
Remove all non-essential people from the area.
Wear personal protection, see Section 8.
Environmental precautions
Do not let product to reach sewer system or any water source.
Methods and materials for containment and cleaning up
Ensure adequate ventilation.
Absorb with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust).
Sweep up and shovel, using non-sparking tools.
Keep in suitable, closed containers for disposal.
Dispose of collected material according to regulations

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.
Do not eat, smoke, or drink during use. Keep out of reach of children.
Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store in cool, dry conditions in sealed containers. Store out of direct sunlight.
Storage temperature 40-90°F. Protect from humidity and water.
Do not heat this material above the flash point.
Keep away from flame. Do not store with oxidizing or acidic materials.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Ingredient	OSHA	ACGIH	
	PEL	TWA	STEL
Isopropyl alcohol	400 ppm	200 ppm	400 ppm
n-Amyl acetate	100 ppm	50 ppm	100 ppm
Xylenes (o-, m-, p-isomers)	100 ppm	100 ppm	150 ppm
Nitrocellulose	Not established	Not established	Not established
Methyl ethyl ketone	200 ppm	200 ppm	300 ppm
Toluene	200 ppm	20 ppm	Not established
2-Methylbutyl acetate	Not established	50 ppm	100 ppm
Naptha, petroleum, hydrotreated light	Not established	Not established	Not established
Ethylbenzene	100 ppm	20 ppm	Not established
1-Naphthalenesulfonic acid, 2-[(2-hydroxy-1-naphthalenyl) azo]-, barium salt (2:1)	Not established	Not established	Not established
Diisononyl phthalate	Not established	Not established	Not established
2-Butoxyethanol	50 ppm	20 ppm	Not established
2-Pentanone, 4-methyl	100 ppm	20 ppm	75 ppm
Isopropyl acetate	250 ppm	100 ppm	200 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

Use safety glasses equipped with side shields. If splashes are likely to occur, wear goggles.

Hand and skin protection

Wear Neoprene or butyl rubber gloves. Protective gloves must be impermeable.
Replace gloves at the first signs of wear.
Prevent skin contact when handling material.

Section 8 Exposure Controls/Personal Protection continued

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.

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

Appearance	Red liquid
Odor	Solvent
Odor Threshold	No data available
pH	Not applicable
Melting point	Not applicable
Freezing point	Not applicable
Boiling range	34 to 238°C
Flash point	43°F (6°C)
Evaporation rate	No data available
Lower explosion limit	No data available
Vapor pressure	31.8 mmHg
Vapor density	No data available
Specific gravity	No data available
WPG	7.91 @ 77°F (25°C)
Water solubility	Negligible
Coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	Not determined
Viscosity (FORD4)	No data available
Coating VOC (as supplied)	5.32 lb/gal
Coating VOC (EPA calculation)	5.35 lb/gal

Section 10 Stability and Reactivity

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Hazardous polymerization will not occur
Conditions to avoid	Heat and open flames
Incompatible materials	Oxidizing agents, peroxides
Hazardous decomposition	Thermal oxidative decomposition can produce carbon monoxide, carbon dioxide, and various hydrocarbons

Section 11 Toxicological Information

Information on toxicological effects

Inhalation Toxicity (mixture) LC50: 71 mg/L
Oral Toxicity (mixture) LD50: 4,755 mg/kg
Dermal Toxicity (mixture) LD50: 4,386 mg/kg

Target Organs

Blood, eyes, kidneys, liver, central nervous system, skin, respiratory system

Carcinogenicity

The following chemical comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA, or ACGIH.

CAS Number	Ingredient	Carcinogen Rating
100-41-4	Ethylbenzene	IARC: Possible human carcinogen OSHA: listed
64742-49-0	Naphtha, petroleum, hydrotreated light	EU REACH: Present (P)
108-10-1	2-Pentanone, 4-methyl-	IARC: Possible human carcinogen OSHA: listed

Section 12 Ecological Information

Toxicity No data available
Persistence and degradability No data available
Bioaccumulative potential No data available
Mobility in soil No data available
Results of PBT & vPvB assessment No data available

Component Ecotoxicity

n-Amyl acetate 96 Hr LC50 Lepomis macrochirus: 650 mg/L [static]

Section 13 Disposal Considerations

Waste Treatment Methods

Must not be disposed of together with household garbage.
Do not allow product to reach sewage system.
Disposal of this product and any by-products must at all times comply with local, state and Federal regulations for hazardous wastes. All entities that store, transport or handle hazardous waste must take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals.

Contaminated Packaging

Waste packaging should be recycled. Care should be taken when handling emptied containers that have not been cleaned. Empty containers retain some product residues. Vapor from that residue may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers.

Section 14 Transport Information

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

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

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

Section 15 Regulatory Information

US Federal Regulations

CERCLA/SARA – Hazardous Substances and Reportable Quantities:

1330-20-7	Xylenes (o-, m-, p- isomers)	10 - 20%
100-41-4	Ethylbenzene	1.0 - 5%

CERCLA/SARA – Section 313 – Emission Reporting: No components listed
CERCLA/SARA – Section 302 – Extremely Hazardous Substances: No components listed
CERCLA/SARA 311/312 Codes: Chronic Health Hazard, Fire Hazard
TSCA Inventory Status: All ingredients listed on TSCA inventory requirements

California Proposition 65

WARNING: ⚠ This product can expose you to chemicals including Toluene 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.

Canada

DSL (Canadian Domestic Substance List): All components listed

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.

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