

Material Safety Data Sheet

Freeman 302 Urethane Protectant

Date of Preparation: September 24, 2007

Revision:

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Freeman 302 Urethane Protectant

Chemical Family: Fluorocarbon

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 1

F 0

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PPE†

†Sec. 8

☆☆☆☆ Emergency Overview ☆☆☆☆

Irritation, dizziness

Section 2 - Composition / Information on Ingredients

Ingredient Name

1,1,1 Tetrafluoroethane

CAS Number

811-97-2

Ingredient	OSHA PEL		ACGIH TLV		Other Mfg. recommended
	TWA	STEL	TWA	STEL	
1,1,1 Tetrafluoroethane	none estab.	none estab.	none estab.	none estab.	1000 ppm

Section 3 - Physical and Chemical Properties

Physical State: Aerosol Can

Appearance: Colorless, gas

Odor: Slight Ether

Vapor Pressure: 3930.7 mm Hg at 68°F

Vapor Density (Air=1): 3.60

Specific Gravity (H₂O=1, at 4 °C): .1.2

Water Solubility: Negligible

Boiling Point: -15° F

Viscosity: N/A

% Volatile: 100%

Section 4 - Fire-Fighting Measures

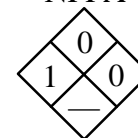
Flammability Classification: Not Flammable at ambient temperature and atmospheric pressure

Extinguishing Media: Water, fog, foam, dry chemical, CO₂.

Unusual Fire or Explosion Hazards: Container areas exposed to intense heat or flame should be cooled with water to prevent pressure build-up and/or weakening of container structure.

Hazardous Combustion Products: N/A

NFPA



Fire-Fighting Instructions: Do not enter confined fire space without full protective gear including a positive pressure, self-contained, NIOSH approved breathing apparatus. Cool fire exposed container with water. Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

Section 5 - Stability and Reactivity

Stability: Freeman 302 Urethane Protectant is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Cannot occur

Chemical Incompatibilities: Acids, alkali, alkaline earth metals and reducing agents

Conditions to Avoid: Avoid high temperatures, open flames and welding arcs

Hazardous Decomposition Products: Thermal oxidative decomposition of Freeman 302 Urethane Protectant can produce hydrofluoric acid, and possibly carbonyl fluoride, carbon dioxide, and carbon monoxide,

Section 6 - Health Hazard Information

Potential Health Effects

Primary Entry Routes: Inhalation and Dermal

Target Organs: Central nervous system, heart

Acute Effects: N/A

Signs and Symptoms:

Inhalation: Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation.

Eye: May cause irritation, redness, tearing and blurred vision

Skin: Liquid may cause frostbite. Prolonged or repeated exposure can cause moderate dermatitis.

Ingestion: Not considered a potential route of exposure

Carcinogenicity: IARC, NTP, and OSHA do not list any component as carcinogenic.

Medical Conditions Aggravated by Long-Term Exposure: N/A

Chronic Effects: N/A

Emergency and First Aid Procedures

Inhalation: Remove victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed.

Eye Contact: Flush eyes with generous amounts of water for at least 15 minutes. Get medical attention if it appears necessary.

Skin Contact: Wash thoroughly with soap and water. Treat for frostbite

Ingestion: In general, no treatment is necessary unless large quantities of product are ingested.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: Because of possible disturbance of cardiac rhythm, catecholamine drugs, such as epinephrine, should be used only in situation of emergency life support

Special Precautions/Procedures: N/A

Section 7 - Spill, Leak, and Disposal Procedures

Precautions: Store at ambient temperatures in well ventilated area. Avoid sparks, open flames, and extreme heat. Protect container from physical damage. Container, even those that have been emptied, can contain product residues. Handle in accordance with good industrial practices. Avoid prolonged or repeated contact with skin. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before use.

Spill /Leak Procedures: Avoid breathing vapors. Evacuate area until vapor has been dispersed. Remove all sources of ignition, stop or reduce discharge if it can be done safely

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Disposal Regulatory Requirements: N/A

Container Cleaning and Disposal: N/A

Ecological Information: N/A

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261.): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) listed/unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ) lb kg)

SARA 311/312 Codes:

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910.)

State Regulations:

California Proposition 65: None

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: N/A

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source. General Mechanical can be used as a backup.

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Administrative Controls: N/A

Respiratory Protection: No respiratory protect should be needed. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

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

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Special Precautions and Comments

Handling Precautions:

Storage Requirements:

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Refrigerant Gases,
N.O.S. (1,1,1,2 Tetrafluoroethane)

Hazard Class: Class 2.2

UN No.: 3159

Packing Group:

Label: Not required

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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