

MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: PFTM Precision Cleaner
Product Number (s): 03190

Manufactured By: CRC Industries, Inc. (215) 674-4300
885 Louis Drive, Warminster, PA 18974
24-Hour Emergency Information: CHEMTREC (800) 424-9300

Section 2: Composition/Information on Ingredients

Component	CAS NUMBER	ACGIH TLV	OSHA PEL	OTHER LIMITS	%
1,1-Dichloro-1-Fluoroethane	1717-00-6	NE	NE	500 ppm	10-20
1,1,1,2-Tetrafluoroethane	811-97-2	NE	NE	1000 ppm	30-40
Decafluoropentane	138495-42-8	NE	NE	200 ppm	40-50

Section 3: Hazards Identification

Emergency Overview

Appearance & Odor: Clear, colorless liquid with a faint ethereal odor.

WARNING: Vapor Harmful. Eye Irritant. Contents Under Pressure.

Potential Health Effects:

Inhalation: Coughing, shortness of breath, dizziness, lightheadedness. High levels may cause central nervous system depression or cardiac arrhythmia.
Eyes: Moderate irritation
Skin: Moderate irritation, defatting
Ingestion: Gastrointestinal discomfort

Carcinogenicity: OSHA: No IARC: No NTP: No
Chronic Overexposure: Skin irritation on repeated contact.
Medical Conditions Aggravated by Exposure: Impaired cardiovascular function such as cardiac arrhythmias may be sensitized by inhalation.

Section 4: First Aid Measures

Inhalation: Remove to fresh air. Give artificial respiration if necessary.
Eyes: Flush with large amounts of water for 15 minutes.
Skin: Remove contaminated clothing and wash area with soap and water.

Ingestion: Call a physician. Do not induce vomiting.

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Section 5: Fire-Fighting Measures

Flashpoint: None Method: TCC LEL: 7.6 UEL: 17.7
Extinguishing Media: Water fog, CO₂ and dry chemical
Hazardous Combustion Products: Halogens, halogen acids, and possibly phosgene.
Fire-fighting Instructions: Remove containers from fire area if possible. Use self-contained breathing apparatus for fire fighting. Aerosol cans may explode if heated above 120°F.

NFPA: Health: 1 Flammability: 0 Reactivity: 1
HMIS: Health: 1 Flammability: 0 Reactivity: 1 PPE: B

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Section 6: Accidental Release Measures

Spill/Leak Procedures: Usually not a problem with aerosols. Area should be ventilated. Absorbent should be used to pick up excess material. All used and unused product should be disposed of in accordance with federal, state and local regulations.

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Section 7: Handling and Storage

Handling Procedures: For Industrial Use Only. Wash hands after using and before handling food.

Storage Procedures: Store in a cool, dry area. Contents are under pressure. Aerosol cans must be maintained below 120°F to prevent cans from exploding.

Aerosol Level 1

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Section 8: Exposure Controls/Personal Protection

Engineering Controls: Provide local ventilation adequate to prevent accumulation of vapors. Use mechanical means if necessary to maintain levels below the exposure limits. If working in a confined space, follow applicable OSHA regulations.

Respiratory: Use NIOSH/MSHA compliant respirators or self-contained breathing apparatus above exposure limits. Follow OSHA regulations 29 CFR 1910.134.

Protective Clothing/Equipment: Wear chemically protective gloves and safety glasses. Use a splash apron and boots if splashing occurs.

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Section 9: Physical & Chemical Properties

Physical State: Liquid Appearance & Odor: Clear, colorless liquid with a faint ethereal odor
Specific Gravity: 1.47@70°F Boiling Point: 89.6°F (initial)

Freezing Point:	ND	Vapor Pressure:	ND
Evaporation Rate:	Fast	Vapor Density (air = 1)	ND
pH:	NA	Solubility:	Slight in water

Volatile Organic Compounds:%:	Exempt	g/L:	Exempt	lbs./gal:	Exempt
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Section 10: Stability and Reactivity

Stability:	Stable	Hazardous Polymerization:	No
Chemical Incompatibilities: aluminum,	Strong oxidizers, strong bases, powdered metals such as magnesium, calcium, zinc		
Conditions to Avoid:	Do not store in aluminum containers.		
Hazardous Decomposition Products:	None		

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Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. See Section 3 of this MSDS for acute symptoms of overexposure and carcinogenicity information.

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Section 12: Ecological Information

Ecotoxicity:	No data available.
Environmental Fate:	No data available for biodegradation.

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Section 13: Disposal Considerations

Disposal: This material if discarded may be hazardous waste under U.S. EPA RCRA regulations. All disposal activities must comply with federal, state and local regulations. Contact your local or state environmental agency for specific rules. Do not dump into sewers, on the ground or into any body of water.

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Section 14: Transportation Information

Shipping Name:	Aerosols	UN Number:	1950	Packing Group:	NA
Hazard Class:	2.2	Placard:	NA		
Label:	NA				
Special Provisions:	Limited Quantity				

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Section 15: Regulatory Information

TSCA: All components are either listed under TSCA or are exempt.
SARA Title III: Section 311/312: Acute
Section 313*: 1,1-Dichloro-1-Fluoroethane
CERCLA/Superfund (RQ): NA
Extremely Hazardous Substances: No
California Prop 65: No

* See section 2 for percentage

Section 16: Additional Information

Prepared By: Michelle Milburn Date: February 21, 2005
Technical Information: (800) 521-3168 CRC #: 429H

This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
LEL:	Lower Explosive Limit	g/L:	grams per Liter
UEL:	Upper Explosive Limit	lbs./gal:	pounds per gallon
PPE:	Personal Protection Equipment	RQ:	Reportable Quantity