

# MATERIAL SAFETY DATA SHEET

## Section 1: Product & Company Identification

**Product Name:** PFT<sup>TM</sup> Precision Cleaner  
**Product Number (s):** 02190, 82190

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

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## 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	20-30
Difluoroethane	75-37-6	1000 ppm	NE	NE	30-40
1-Methyl Nonafluorobutyl Ether	163702-07-6	NE	NE	600 ppm	10-20
1-Methyl Nonafluoroisobutyl Ether	163702-08-7	NE	NE	600 ppm	10-20

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## 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: Dizziness, lightheadedness. High levels may cause asphyxiation or cardiac arrhythmias.  
Eyes: Irritation  
Skin: Irritation, defatting  
Ingestion: NA

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.

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## 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.

Section 5: Fire-Fighting Measures

Flashpoint:	None	Method:	TCC	LEL:	7.6	UEL:	17.7
Extinguishing Media:	Water fog, CO <sub>2</sub> 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

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.

Section 7: Handling and Storage

Handling Procedures: Store in a cool, dry area. Aerosol cans must be maintained below 120°F to prevent cans from exploding.

Aerosol Level 1

Section 8: Exposure Controls/Personal Protection

Engineering Controls: 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.

Section 9: Physical & Chemical Properties

Physical State:	Liquid	Appearance & Odor:	Clear, colorless liquid with a faint ethereal odor
Specific Gravity:	1.36@70°F	Boiling Point:	89.6°F
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: Strong oxidizers.  
Materials to Avoid: Powered metals such as aluminum, magnesium, calcium, zinc. Do not store in aluminum containers.  
Hazardous Decomposition Products: None  
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  
Hazard Class: 2.2 UN Number: 1950 Packing Group: NA  
Label: NA Placard: 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

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Section 16: Additional Information

Prepared By: Adam M. Selisker Date: July 10, 2002  
Technical Information: (800) 521-3168 CRC #: 429G

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  
ppm: Parts per Million  
TCC: Tag Closed Cup  
LEL: Lower Explosive Limit  
UEL: Upper Explosive Limit  
PPE: Personal Protection Equipment

NA: Not Applicable  
ND: Not Determined  
NE: Not Established  
g/L: grams per Liter  
lbs./gal: pounds per gallon  
RQ: Reportable Quantity