



MATERIAL SAFETY DATA SHEET

IDENTITY: 2,2,3-TRICHLOROHEPTAFLUOROBUTANE (HALOCARBON 437)

SECTION I: MANUFACTURER

HALOCARBON PRODUCTS CORPORATION      Emergency Number:                    (803) 278 3504  
P.O. Box 661                                    Customer Service & Sales:    (201) 262 8899  
River Edge, N.J. 07661

Prepared by: Dr. Lee G. Sprague

SECTION II: CHEMICAL IDENTITY

Components	CAS No.	OSHA PEL	ACGIH TLV	Other Limits
2,2,3-Trichloroheptafluorobutane	335-44-4	None	None	None

OSHA HAZARD RATING:

This product contains the following toxic chemical(s) subject to Section 313 Title III reporting requirements (40 CFR Part 372).

None

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point : 98 C                                    Vapor Pressure: 86 mm Hg (100 F)  
Melting Point : 4 C                                    Vapor Density(Air=1): Approx. 10  
Specific Gravity(H2O=1): 1.7                                    Solubility in Water : Negligible

Appearance and Odor: Colorless liquid with ethereal odor



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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method: None                      Autoignition Temp: Not determined  
Flammability Limits in Air    -    LEL: N/A                      UEL:    N/A

Extinguishing Media: Non-flammable. Use method appropriate for surroundings.

Special Fire Fighting Procedures: Firefighters should wear self contained breathing apparatus if there is danger of container leakage.

Unusual Fire and Explosion Hazards: Thermal decomposition products are toxic and corrosive.

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SECTION V - REACTIVITY DATA

Unstable    [ ]        Conditions to Avoid:    N/A  
Stable        [X]

Incompatibility (Materials to Avoid): Active metals like sodium and potassium, finely divided aluminum, zinc and magnesium.

Hazardous Decomposition or By-products: Thermal decomposition products toxic and corrosive.

Hazardous Polymerization    [ ] May Occur    [X] Will Not Occur  
Conditions To Avoid: N/A



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SECTION VI - HEALTH HAZARD DATA

This material is expected to be an anesthetic and inhalation of high concentrations may produce asphyxiation. Levels above 2500 ppm in air may impair psychological and psychomotor functions. Higher levels may cause cardiac arrhythmias. The toxicological properties of this product have not been investigated.

Primary routes of entry:  Inhalation  Skin  Eyes  Oral

Acute Effects of Overexposure: Unknown.

Chronic Effects of overexposure: Unknown

Carcinogenicity listing:  NTP  IARC  OSHA  
 Other:

First Aid

Inhalation: Remove to fresh air. Give artificial respiration if necessary.

Skin: Wash with soap and water.

Eye: Flush eyes for at least 15 minutes with copious quantities of water. Seek medical help.

Oral: Try to induce vomiting. Seek medical help.

Medical Conditions Generally Aggravated by Exposure: None known.

Other Health Hazards: None known.

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SECTION VII - PROTECTION INFORMATION

Respiratory: None normally required. For large spills wear self-contained breathing apparatus.

Ventilation: Adequate general ventilization plus local exhaust at points of emission.

Eye and Face: Safety glasses/goggles on face shield.

Gloves: Impervious gloves.

Other equipment: None normally required.



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SECTION VIII - SPILL, LEAK AND DISPOSAL PROCEDURES

Spill, Leak, or Release: Spills may be picked up with absorbent such as vermiculite and held in covered container for disposal.

Waste Disposal: May be incinerated by licensed waste disposal company.  
Observe all federal, state and local regulations.

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SECTION IX - OTHER INFORMATION

1. Hazardous Materials/Dangerous Goods Shipping Regulations

U.S. (49 CFR): Proper Shipping Name: Non-Hazardous Material

IATA: Proper Shipping Name: Non-Dangerous Goods

IMDG: Proper Shipping Name: Non-Dangerous Goods

2. Other Information: HMIS Labeling: H 1; F 0; R 0; P A

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Revised: OCTOBER 16, 2000