



MATERIAL SAFETY DATA SHEET

IDENTITY: TRIFLUOROACETALDEHYDE METHYL HEMIACETAL (TFAAMH)

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: MSDS Coordinator

SECTION II: HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Components	CAS No.	OSHA PEL	ACGIH TLV	Other Limits
Trifluoroacetaldehyde methyl-hemiacetal	431-46-9	None	None	None
Contains up to 10% methanol				

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 : 95-96C    Vapor Pressure: Not Available  
Melting Point : Not available    Vapor Density(Air=1): >1  
Specific Gravity(H<sub>2</sub>O=1): 1.36    Solubility in Water : Soluble

Appearance and Odor: Flammable, colorless liquid

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method: 46.1C (115F)    Autoignition Temp: Not Determined  
Flammability Limits in Air - LEL: Not Determined UEL: Not Determined

Extinguishing Media: Carbon dioxide, regular dry chemical. Use methods appropriate for surroundings.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin or eyes. Thermal decomposition products are corrosive and toxic.

Unusual Fire and Explosion Hazards: Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air. Vapor may travel considerable distance to source of ignition and flash back.

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## SECTION V - REACTIVITY DATA

Unstable  Conditions to Avoid: Material is flammable. keep away  
Stable  from sources of ignition.

Incompatibility (Materials to Avoid): Acids,moisture,strong oxidizing agents

Hazardous Combustion or Decomposition Products: Includes toxic fumes of carbon dioxide, carbon monoxide, and hydrogen fluoride.

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

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## SECTION VI - HEALTH HAZARD DATA

May be harmful if inhaled. Harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation. May be irritating to eyes.

Toxicity data for trifluoroacetaldehyde methyl hemiacetal:

Animal	Route	Dose	Source
Mouse	Oral	LD(50) 750mg/kg	RTECS (#KL6600000)
Mouse	Intraperitoneal	LD(50) 550mg/kg	RTECS (#KL6600000)

Primary routes of entry:  Inhalation  Skin  Eyes  Oral

Acute Effects of overexposure: Unknown

Chronic Effects of overexposure: Unknown

Carcinogenicity listing:  No] NTP  No] IARC  No] OSHA  
 No] Other:

Exposure Limits/Toxicity: See also Section II

### First Aid

Inhalation: Remove to fresh air and give artificial respiration if necessary. Seek medical help

Skin: Wash affected area immediately for 15 minutes. Remove contaminated clothing and shoes. Seek medical help if needed.

Eye: Flush eyes with plenty of water for at least 15 minutes. Consult physician.

Oral: If swallowed wash out mouth with water provided person is conscious. Seek medical attention.

Medical Conditions Generally Aggravated by Exposure: No information available.

Other Health Hazards: No information available.

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SECTION VII - PROTECTION INFORMATION

Respiratory: Self-contained breathing apparatus for emergency use.

Ventilation: Provide adequate general and local explosion proof ventilation

Eye and Face: Safety glasses or goggles

Gloves: Wear appropriate chemical resistant gloves.

Other equipment: Keep container closed and away from heat and open flame.

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SECTION VIII - SPILL, LEAK AND DISPOSAL PROCEDURES

Spill, Leak, or Release: Avoid breathing vapors and keep personnel upwind. Wear self-contained breathing apparatus, rubber boots and heavy chemical resistant gloves. Absorb on sand or vermiculite and place in closed container for disposal. Ventilate area and wash spill site after material is picked up.

Waste Disposal: Burn in a chemical incinerator equipped with an afterburner and scrubber. Exert care in igniting since this material is flammable. Observe all federal, state and local regulations.

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SECTION IX - OTHER INFORMATION

1. Hazardous Material/Dangerous Goods Shipping Regulations

U.S. (49 CFR): Proper Shipping Name:Flammable Liquids, N.O.S.,  
(Trifluoroacetaldehyde Methyl Hemiacetal)  
Hazard Class: 3; ID No.: UN1993  
Packing Group: III

IATA: Proper Shipping Name:Flammable Liquids, N.O.S.,  
(Trifluoroacetaldehyde Methyl Hemiacetal)  
Hazard Class: 3; ID No.: UN1993  
Packing Group III

IMDG: Proper Shipping Name:Flammable Liquids, N.O.S.,  
(Trifluoroacetaldehyde Methyl Hemiacetal)  
Hazard Class: 3; ID No.: UN1993  
Packing Group III

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

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REVISED: JANUARY 24, 2007