



MATERIAL SAFETY DATA SHEET

IDENTITY: TRIFLUOROACETIC ANHYDRIDE

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
Trifluoroacetic Anhydride	407-25-0	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 : 40C Vapor Pressure: 400 mm Hg (70F)
Melting Point : -65C Vapor Density(Air=1): Not determined
Specific Gravity(H2O=1): 1.5 Solubility in Water: Reacts violently to form water-soluble trifluoroacetic acid.

Appearance and Odor: Colorless liquid with vinegar odor.

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 methods appropriate for surroundings. If containers have ruptured, water will react violently with trifluoroacetic anhydride.

Special Fire Fighting Procedures: Firefighters should wear self-contained respirators and protective clothing to avoid skin contact.

Unusual Fire and Explosion Hazards: Toxic fumes under fire conditions.



=====

SECTION V - REACTIVITY DATA

Unstable [] Conditions to Avoid: Reacts violently with water and
Stable [X] alkaline materials. Considerable
heat is released on mixing with
water.

Incompatibility (Materials to Avoid): Water, alcohols, amines and similar
compounds.

Hazardous Decomposition or By-products: Halogen acids formed by thermal
decomposition.

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

=====

SECTION VI - HEALTH HAZARD DATA

Toxicity is unknown. It is a reactive compound which is easily hydrolysed
to trifluoroacetic acid on contact with skin and causes immediate burns.
The acid diffuses into skin and destroys tissue as it penetrates. Acid
fumes are also irritating. Wash any affected area for at least 15 minutes
and treat as third degree burn even though appearance may not indicate
severity of skin damage. Subcutaneous injections of calcium gluconate are
not indicated.

Toxicity data for trifluoroacetic acid in rats: Oral LD50 200 mg/kg;
inhalation LC50 10 mg/L. In a one hour acute inhalation study in rats, all
animals exposed to 6.57 mg/l (1440 ppm) survived with no gross pathological
findings.

Unlike the monofluoroacetate ion, the trifluoroacetic ion is not toxic.

Primary routes of entry: [X] Inhalation [X] Skin [] Eyes [] Oral

Acute Effects of Overexposure: Unknown except for destruction of tissue on
skin contact.

Chronic Effects of overexposure: Unknown.

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

First Aid

Inhalation: Remove to fresh air. If necessary, give artificial
respiration and seek medical help.

Skin: Wash immediately with water. Treat as third degree burn.

Eye: Flush eyes for at least 15 minutes. Seek medical help.

Oral: Give water and milk of magnesia to drink. Do not induce
vomiting. Seek medical help.

Medical Conditions Generally Aggravated by Exposure: None known.

Other Health Hazards: None known.



=====
SECTION VII - PROTECTION INFORMATION

Respiratory: Self-contained breathing apparatus for emergency use.

Ventilation: Adequate general and local exhaust ventilation.

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

Gloves: Impervious Neoprene gloves.

Other equipment: Wear rubber apron where danger of splashing occurs.
Provide eye wash and safety shower facilities. Acid jacket & pants should be worn when connecting, disconnecting or sampling trifluoroacetic anhydride bulk containers.

=====
SECTION VIII - SPILL, LEAK AND DISPOSAL PROCEDURES

Spill, Leak, or Release: Avoid breathing vapors. Wash spill with copious amounts of water (heat released!). Neutralize the aqueous solution with caustic soda when possible.

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

=====
SECTION IX - OTHER INFORMATION

1. Hazardous Materials/Dangerous Goods Shipping Regulations

U.S. (49 CFR): Proper Shipping Name: Corrosive Liquid, Acidic, Organic
N.O.S. (Trifluoroacetic Anhydride)
Hazard Class: 8; ID No.: UN 3265
Packaging Group: I

IATA: Proper Shipping Name: Corrosive Liquid, Acidic, Organic
N.O.S. (Trifluoroacetic Anhydride)
Hazard Class: 8; ID No.: UN 3265
Packaging Group: I

IMDG: Proper Shipping Name: Corrosive Liquid, Acidic, Organic,
N.O.S. (Trifluoroacetic Anhydride)
Hazard Class: 8; ID No.: UN 3265
Packaging Group: I

2. Other Information: HMIS Labeling: H 3; F 0; R 1; P D

=====
REVISED: MAY 14, 2003