



MATERIAL SAFETY DATA SHEET

IDENTITY: ETHYL 3-AMINO-4,4,4-TRIFLUOROCROTONATE (FOR RESEARCH USE ONLY)

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

Hazardous Components	CAS No.	OSHA No.	ACGIH PEL	Other TLV	Limits
Ethyl 3-amino-4,4,4-trifluorocrotonate		372-29-2	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. This chemical is not listed on TSCA inventory.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point : 83C/15mm Vapor Pressure: Not available
Melting Point : 26C Vapor Density(Air=1): >1
Specific Gravity(H2O=1): 1.245 Solubility in Water : Insoluble

Appearance and Odor: Clear liquid with sweet odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method: 65C Autoignition Temp: Not determined
Flammability Limits in Air - LEL: Not Available UEL: Not Available

Extinguishing Media: Combustible liquid. Use methods appropriate for surroundings.

Special Fire Fighting Procedures: Combustible liquid. Evacuate personnel to safe area. Avoid breathing decomposition products. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin or eyes.

Unusual Fire and Explosion Hazards: Toxic decomposition products in fire include hydrogen fluoride.

Continued

SECTION V - REACTIVITY DATA

Unstable Conditions to Avoid: (see incompatibles)
Stable

Incompatibility (Materials to Avoid): Strong acids, strong bases, oxidizing agents, strong reducing agents.

Hazardous Decomposition or By-products: Toxic fumes of carbon dioxide, carbon monoxide, hydrogen fluoride, nitrogen oxides.

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

Store in a cool, dry place under nitrogen. Keep container tightly closed.

SECTION VI - HEALTH HAZARD DATA

Vapor or mist is irritating to tissue of the mucous membranes, upper respiratory tract, skin and eyes. Skin contact may cause skin irritation. To the best of our knowledge, the physical, chemical and toxicological properties have not been thoroughly investigated.

Primary routes of entry: Inhalation Skin Eyes Oral

Acute Effects of Overexposure: Unknown

Chronic Effects of overexposure:

Carcinogenicity listing: NTP IARC OSHA
 Other:

First Aid

Inhalation: Remove to fresh air and give artificial respiration if necessary. If breathing is difficult, give oxygen. Call a physician.

Skin: Wash affected area immediately for at least 15 minutes while removing contaminated clothing and shoes. Seek medical help if needed.

Eye: Flush eyes with plenty of water for at least 15 minutes. Get immediate medical help.

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

SECTION VII - PROTECTION INFORMATION

Respiratory: Under conditions of frequent use or where there is potential for airborne exposure in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection. Use self-contained breathing apparatus for emergency use.

Ventilation: Mechanical exhaust recommended.

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

Gloves: Wear appropriate chemical resistant gloves.

Other equipment: Where there is potential for skin contact, wear impervious gloves, boots, pants and jacket. Store in a cool, dry place under nitrogen. Keep container tightly closed.

SECTION VIII - SPILL, LEAK AND DISPOSAL PROCEDURES

Spill, Leak, or Release: Evacuate area. Wear self-contained breathing apparatus, protective clothing and absorb material on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after pickup of spilled material is complete.

Waste Disposal: Dissolve or mix with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

SECTION IX - OTHER INFORMATION

1. Hazardous Materials/Dangerous Goods Shipping Regulations:

U.S. (49CFR): Proper Shipping Name: Combustible liquid N.O.S.
(Ethyl 3-amino-4,4,4-trifluorocrotonate)
Hazardous Class: Combustible liquid ID No. NA 1993
Packaging Group: III

IATA: Proper Shipping Name: Non-hazardous for air transport.

IMDG: Proper Shipping Name: Non-hazardous.

MARCH 9, 2006