ATTN: SAFETY DIRECTOR
UNIVERSITY OF WISCONSIN WHITewater
PO Box 296
WHITewater WI 53190

DATE: 08/28/89
CUST # 523216 P.O. # QC3812

STeven ANDERson

MATERIAL SAFETY DATA SHEET PAGE: 1

-------------- IDENTIFICATION -----------------

PRODUCT #: 10623-2 NAME: TRIFLUoroACETIC ANHYDRIDE, 99+%  
CAS #: 407-25-0  
MP: C4F6O3

SYNONYMS  
ANHYDRIDE KYSELINY TRIFLUOROCITCE (CZECH) * BIS(TRIFLUoroACETIC)  
ANHYDRIDE * HEXAFLUOROCITCE ANHYDRIDE * PERFLUoroACETIC ANHYDRIDE *  
TRIFLUoroACETIC ACID ANHYDRIDE * TRIFLUoroACETIC ANHYDRIDE *  
TRIFLUoroACETYL ANHYDRIDE *

-------------- TOXICITY HAZARDS ----------------

RTECS #: AJ3800000  
ACETIC ACID, TRIFLUoro-, ANHYDRIDE

IRRITATION DATA  
SKIN: RDT 750 UG/24H SEV  
EYE: RDT 5 UG/24H SEV

REVIEWS, STANDARDS, AND REGULATIONS  
EPA TSCA CHEMICAL INVENTORY, 1986

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)  
DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

-------------- HEALTH HAZARD DATA ----------------

ACUTE EFFECTS  
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES  
AND LUNG RESPIRATORY TRACT, EYES AND SKIN.
INHALATION MAY BE FATAL AS A RESULT OF SPASTM, INFLAMMATION AND EDema  
OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA.  
SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING,  
WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND  
VOMITING.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND  
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

FIRST AID  
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH copiOUS  
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED  
CLOTHING AND SHOES.  
ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS  
WITH FINGERS.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.  
CALL A PHYSICIAN.
WASH CONTAMINATED CLOTHING BEFORE REUSE.  
DISCARD CONTAMINATED SHOES.

-------------- PHYSICAL DATA ------------------

MELTING POINT: -65 °C
BOILING POINT: 39.5 °c TO 40 °C
SPECIFIC GRAVITY: 1.487
VAPOR PRESSURE: 400.0 MM Hg 21.1 °C
MATERIAL SAFETY DATA SHEET

CATALOG #: 10623-2
NAME: TRIFLUOROACETIC ANHYDRIDE, 99+% 

APPEARANCE: COLORLESS LIQUID

------------------- FIRE AND EXPLOSION HAZARD DATA -------------------
FLASH POINT: NONE
EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM.
SPECIAL FIRE FIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.
UNUSUAL FIRE AND EXPLOSION HAZARDS: EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

------------------- REACTIVITY DATA -------------------
INCOMPATIBILITIES: STRONG OXIDIZING AGENTS, STRONG ACIDS, STRONG BASES, ALCOHOLS.
DO NOT ALLOW WATER TO ENTER CONTAINER BECAUSE OF VIOLENT REACTION.
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: TOXIC FUMES OF CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN FLUORIDE.

------------------- SPILL OR LEAK PROCEDURES -------------------
STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: EVACUATE AREA, WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES, ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL, VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
WASTE DISPOSAL METHOD: DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
OBSERVE ALL FEDERAL, STATE & LOCAL LAWS.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---
WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
USE ONLY IN A CHEMICAL FUME HOOD.
FACESHIELD (8-INCH MINIMUM).
DO NOT BREATH VAPOR.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
CORROSIVE.
KEEP TIGHTLY CLOSED.
MOISTURE SENSITIVE.
STORE IN A COOL DRY PLACE.

------------------- ADDITIONAL PRECAUTIONS AND COMMENTS -------------------
ADDITIONAL INFORMATION:
DISTILLATION OF TRIFLUOROACETIC ANHYDRIDE FROM POTASSIUM PERMANGANATE RESULTED IN AN EXPLOSION OF THE APPARATUS A FEW HOURS AFTER THE DISTILLATION WAS STOPPED. (CHEM. ENG. NEWS, P.2, MARCH 30, 1987)
THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. ALDRICH SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.