IDENTIFICATION

MSDS Record Number: 5618709
Product Name(s): TRIFLUOROACETIC ANHYDRIDE
Product Identification: MSDS NUMBER: T5564
                        PRODUCT CODE: W732
                        C.A.S. NUMBER: 407-25-0
Date of MSDS: 2006-11-10
Currency Note: This MSDS was acquired from the supplier on 2007-09-06.

MANUFACTURER/SUPPLIER INFORMATION

Company: MALLINCKRODT BAKER INC

MATERIAL SAFETY DATA

Effective Date: 11/10/06
Supersedes: 02/12/04

MSDS MATERIAL SAFETY DATA SHEET
CHEMTREC: 800-424-9300 (USA)
703-527-3887 (Outside USA & CANADA)
CANUTEC: 613-996-6666

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865

Emergency Telephone Number: 908-859-2151
NOTE: Use CHEMTREC and CANUTEC phone numbers only in the event of a chemical emergency.

All non-emergency questions should be directed to Customer Service
(1-800-582-2537) for assistance.
J. T. BAKER

TRIFLUOROACETIC ANHYDRIDE

1. Product Identification
   Synonyms: Trifluoroacetic acid anhydride; Perfluoracetic anhydride; Hexafluoroacetic anhydride
   CAS No: 407-25-0
   Molecular Weight: 210.03
   Chemical Formula: F3CCO.OCO.CF3
   Product Codes: W732

2. Composition/Information on Ingredients
3. Hazards Identification
   Emergency Overview
   ----------------------------------------------
   DANGER! CORROSIVE. CAUSES BURNS TO ANY AREA OF CONTACT. HARMFUL IF SWALLOWED OR INHALED. WATER REACTIVE.
   SAF-T-DATA(tm) Ratings (Provided here for your convenience)
   ----------------------------------------------
   Health Rating: 3 - Severe
   Flammability Rating: 1 - Slight
   Reactivity Rating: 3 - Severe (Water Reactive)
   Contact Rating: 4 - Extreme (Corrosive)
   Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES
   Storage Color Code: White Stripe (Store Separately)
   ----------------------------------------------

   Potential Health Effects
   ----------------------------------------------
   Information on the human health effects from exposure to this substance is limited.
   Inhalation:
   Corrosive. Extremely destructive to tissues of the mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.
   Ingestion:
   Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach. Can cause sore throat, vomiting, diarrhea.
   Skin Contact:
   Corrosive. Symptoms of redness, pain, and severe burn can occur.
   Eye Contact:
   Corrosive. Contact can cause blurred vision, redness, pain and severe tissue burns.
   Chronic Exposure:
   No information found.
   Aggravation of Pre-existing Conditions:
   No information found.
   ----------------------------------------------

4. First Aid Measures
   Inhalation:
   Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
   Ingestion:
   If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
   Skin Contact:
   Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.
   Eye Contact:
   Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
5. Fire Fighting Measures
Fire:
Not considered to be a fire hazard.
Explosion:
Not considered to be an explosion hazard.
Fire Extinguishing Media:
Dry chemical, foam or carbon dioxide. Do not use water. May react strongly with water.
Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures
Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Be aware of the potential for violent reaction with water. Neutralize with soda ash or lime. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. Handling and Storage
Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Keep away from water. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection
Airborne Exposure Limits:
None established.
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.
Personal Respirators (NIOSH Approved):
For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Eye Protection:
Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties
Appearance: Clear, colorless liquid.
Odor: No information found.
Solubility: Soluble in water.
Specific Gravity: 1.50
pH: No information found.
% Volatiles by volume @ 21C (70F): 100

Boiling Point: 40C (104F)
Melting Point: -85C (-185F)
Vapor Density (Air=1): No information found.
Vapor Pressure (mm Hg): No information found.
Evaporation Rate (BuAc=1): No information found.

10. Stability and Reactivity
Stability: Stable under ordinary conditions of use and storage. Hygroscopic.
Hazardous Decomposition Products: Burning may produce carbon monoxide, carbon dioxide and other toxic materials including hydrogen fluoride.
Hazardous Polymerization: Will not occur.
Incompatibilities: Lithium tetrahydro aluminate, strong oxidizers, strong acids, strong bases and alcohols. Do not allow water to enter container because of violent reaction.
Conditions to Avoid: Water and incompatibles.

11. Toxicological Information
No LD50/LC50 information found relating to normal routes of occupational exposure.

---\Cancer Lists\---

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Trifluoroacetic Acid Anhydride (407-25-0)

12. Ecological Information
Environmental Fate: No information found.
Environmental Toxicity: No information found.

13. Disposal Considerations
Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information
Domestic (Land, D.O.T.)

Proper Shipping Name: CORROSIVE LIQUID, WATER-REACTIVE, N.O.S. (TRIFLUOROACETIC ANHYDRIDE)
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15. Regulatory Information

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16. Other Information

Nejpa Ratings:
- Health: 3
- Flammability: 0
- Reactivity: 2
- Other: Water reactive

Label Hazard Warning:
DANGER! CORROSIVE. CAUSES BURNS TO ANY AREA OF CONTACT. HARMFUL IF SWALLOWED OR INHALED. WATER REACTIVE.

Label Precautions:
- Do not breathe vapor.
- Do not get in eyes, on skin, or on clothing.
Keep container closed.
Do not contact with water.
Use only with adequate ventilation.
Wash thoroughly after handling.
Label First Aid:
In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In all cases get medical attention immediately.
Product Use:
Laboratory Reagent.
Revision Information:
MSDS Section(s) changed since last revision of document include: 3.

Disclaimer:
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Prepared by: Environmental Health & Safety
Phone Number: (314) 654-1600 (U.S.A.)
T5564

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©2007 Canadian Centre for Occupational Health & Safety
www.ccohs.ca E-mail: clientservice@ccohs.ca Fax: (905) 572-2206 Phone: (905) 572-2981
Mall: 135 Hunter Street East, Hamilton Ontario L8N 1M5