

# MATERIAL SAFETY DATA SHEET



Date Issued: 08/02/2010  
MSDS No: 2010.079

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT CODE:** A0300  
**PRODUCT FORMULATION NAME:** 2-Acetoxyethyltrichlorosilane  
**MOLECULAR FORMULA:** C<sub>4</sub>H<sub>7</sub>Cl<sub>3</sub>O<sub>2</sub>

### MANUFACTURER

UCT Specialties, Inc.  
2731 Bartram Road  
Bristol, PA 19007

**Emergency Contact:** Jon Telepchak  
**E-Mail:** jtelepchak@unitedchem.com  
**Product Stewardship:** 215-781-9255  
ex141  
**Service Number:** 717-247-0896

### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CANUTEC (Canadian Transportation) :**(613) 996 - 6666  
**CHEMTREC (US Transportation) :**(800) 424 - 9300

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Clear liquid

**IMMEDIATE CONCERNS:** Material generates Hydrogen Chloride and Acetic Acid on contact with water and moisture

### POTENTIAL HEALTH EFFECTS

**EYES:** \* Conjunctivitis, corneal damage. Causes chemical burns

**SKIN:** \*Corrosive- causes tissue destruction, May cause severe chemical burns

**INGESTION:** \*May cause severe chemical burns. harmful. Avoid contact.

**INHALATION:** \*Cause irritation or damage to lung. Harmful. Avoid contact

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**SKIN ABSORPTION:** Prolonged or widespread contact may result in the absorption of potentially harmful material.

**INGESTION:** If ingested this material may cause severe burns of the mouth, pharynx, esophagus and stomach

**INHALATION:** Resirable vapors or mists are irritating to the upper respiratory tract and Bronchi. Inhalation may be fatal as a result of spasm, inflammation, and edema of the lungs or larynx

**ACUTE TOXICITY:** Liquids and vapors react with moisture on the skin, eyes and mucous membrane to release Acetic Acid (corrosive) and Hydrogen Chloride which is severely irritating to these tissues.

Prolonged or repeated exposure and /or high concentration of vapors will produce chemical burns and destruction of affected tissue.

**COMMENTS:** The information provided here is based on published data for structurally analogous chemicals (not bio-assay of this specific substance)

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS
2-Acetoxyethyltrichlorosilane	18204-80-3

### 4. FIRST AID MEASURES

**EYES:** Flush with clean water for at least 15 minutes and consult physician

!!!!!!Get Medical Attention Immediately!!!!!!

**SKIN:** Scrub with soap and water. Remove contaminated clothing and shoes

**INGESTION:** Give one full cup of milk or water to dilute ingested material. Get medical attention

**INHALATION:** Remove victim to fresh air, give CPR or oxygen if necessary

**COMMENTS:** If symptoms persist, get medical attention

Never give anything by mouth to an unconscious person

### 5. FIRE FIGHTING MEASURES

**FLASH POINT AND METHOD:** 82°C (180°F) (Closed cup)

**EXTINGUISHING MEDIA:** Alcohol Foam, dry chemical, CO<sub>2</sub>.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Evacuate spill area of all non-essential personnel, ventilate the spill area, cover liquid completely (smother) with dry sodium bicarbonate and blanket spill area with inert gas. Place absorbed material in a dry, lined waste container before transporting it for disposal. Keep all sources of ignition away from the spill area until clean-up is complete.

**LARGE SPILL:** Evacuate spill area of all non-essential personnel, ventilate the spill area, and cover liquid completely with non reactive high expansion foam. Use water mist to knock down any hydrogen chloride vapors that might be generated.

**RELEASE NOTES:** CAUTION: Never direct the hose stream into an unignited spill

### 7. HANDLING AND STORAGE

**HANDLING:** Container requires grounding during use.

**STORAGE:** Store in a cool and dry place. Protect from moisture. Protect from heat, direct sunlight, and source of ignition. Store away from alkaline, acidic and oxidizing materials. Maintain tightly closed container. Provide adequate ventilation.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Local exhaust ventilation may be necessary to control any fume levels during the use of this product.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Use chemical goggles and face shield.

**SKIN:** Use impervious gloves. Use impervious clothing as necessary to protect against skin contact.

**RESPIRATORY:** Local exhaust recommended. Mechanical ventilation recommended.

Use chemical cartridge respirator with appropriate cannister(s). use supplied air respirator

**WORK HYGIENIC PRACTICES:** General industrial hygiene practice.

**COMMENTS:** To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29 CFR 1910.132) be conducted before using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Sharp acid like odor

**COLOR:** Clear

**VAPOR DENSITY:** > 1

**BOILING POINT:** 143°C /70mm

**FLASH POINT AND METHOD:** 82°C (180°F) (Closed cup)

**SOLUBILITY IN WATER:** Reacts

**SPECIFIC GRAVITY:** 1.272

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**STABILITY:** (UNDER NORMAL CONDITIONS): Stable under ordinary conditions of use and storage.

**POLYMERIZATION:** Hazardous polymerization may occur

**CONDITIONS TO AVOID:** Avoid contact with waters, alcohols, oxidizing agents, alkali and acid.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Generates Hydrogen Chloride; TLV= C5ppm, and Acetic Acid, TVL (TWS)=10ppm

## 11. TOXICOLOGICAL INFORMATION

### CARCINOGENICITY

**IARC:** No

**NTP:** No

**OSHA:** No

**COMMENTS:** No information available

Material generates Hydrogen Chloride on contact with water and alcohols.

Hydrochloric Acid (aqueous): Toxicity Data: ihl-hmn LCLo: 1300ppm/ 30 minutes; unk-man LDLo: 81 mg/kg; ihl-rat LC50: 3124ppm / 1 hour; ihl-mus LC50: 1180ppm/ 1 hour; ihl-man LCLo: 1000 mg/m<sup>3</sup>/ 2 hour; orl -rbt LD50: 900 mg/kg.

Hydrogen Chloride (gas): Toxicity Data: ihl-rat LC50: 5660ppm / 30 minutes; ihl- mus LC50: 2142ppm/ 30 minutes

Material generates Acetic Acid on contact with water or moisture.

Acetic Acid: Toxicity Data: ihl-hmn TCLo: 816 ppm/3 minutes; ihl-rat LCLo: 16,000ppm/ 4 hours; orl-hmn TDLo: 1470 ug/kg; orl -ratLD50 : 3530 mg/kg; skn-rbt LD50: 1060 mg/kg

Irritation Data: skn-hmn 50 mg/ 24 hours MLD irr; Skn-rbt 525 mg (open) SEV IRR; eye-rbt 100 mg (rinsed) MLD IRR

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** No information available

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements. It is recommended that waste generators determine whether a discarded chemical is classified as a hazardous waste.

Additionally, waste generators must consult with their waste broker, state and local hazardous waste regulations to ensure complete and accurate classification.

**EMPTY CONTAINER:** Containers of this material may be hazardous when empty since they retain product residues(liquid); observe all warnings and precautions listed for this product.

#### 14. TRANSPORT INFORMATION

##### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Chlorosilanes, corrosive, N.O.S.

**TECHNICAL NAME:** (2-Acetoxyethyltrichlorosilane)

**PRIMARY HAZARD CLASS/DIVISION:** 8

**UN/NA NUMBER:** 2987

**PACKING GROUP:** II

**NAERG:** 156

#### 15. REGULATORY INFORMATION

##### UNITED STATES

##### DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Corrosive

##### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA STATUS:** This product is listed on the TSCA Inventory.

#### 16. OTHER INFORMATION

**APPROVED BY:** Office of Environmental Health Safety & Security

**TITLE:** Dir. of Env. Health Safety &

Security

**PREPARED BY:** jnm

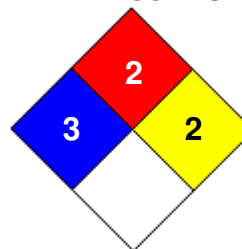
**INFORMATION CONTACT:** jtelepchak@unitedchem.com

**REVISION SUMMARY:** New MSDS

##### HMIS RATING

<b>HEALTH:</b>	<b>3</b>
<b>FLAMMABILITY:</b>	<b>2</b>
<b>PHYSICAL HAZARD:</b>	<b>2</b>
<b>PERSONAL PROTECTION:</b>	

##### NFPA CODES



**MANUFACTURER SUPPLEMENTAL NOTES:** All technical data is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.

**MANUFACTURER DISCLAIMER:** The data in this Material Safety Data Sheet relates only to the specific material designated herein.

It does not relate to use in combination with any other material or in any process.

THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS MATERIAL SAFETY DATA SHEET

---

HAVE BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND TO REPRESENT THE BEST OPINION ON THE SUBJECT AS OF THE DATE ON THIS SHEET. HOWEVER, NO WARRANTY, GUARANTEE OR REPRESENTATION, EXPRESS OR IMPLIED, IS MADE BY UCT, INC. AS TO THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION OR TO THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.