

# MATERIAL SAFETY DATA SHEET



Date Issued: 08/18/2010  
MSDS No: 2010.195

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT CODE:** C3555.3  
**PRODUCT FORMULATION NAME:** Cyanopropyltriethoxysilane  
**MOLECULAR FORMULA:** C<sub>10</sub>H<sub>21</sub>NO<sub>3</sub>Si

### 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:** Colorless to yellow liquid

**IMMEDIATE CONCERNS:** Material may form a siloxane polymer on the skin, eyes or in the lungs. In the event of direct contact of the liquid with these tissues, seek medical attention.

### POTENTIAL HEALTH EFFECTS

**EYES:** \*Irritant

**SKIN:** \* Irritant

**INGESTION:** No information available -Avoid contact

**INHALATION:** \* Causes irritation or damage to lung

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**ACUTE TOXICITY:** Material generates Ethanol on contact with water or moisture on the skin, eyes and mucous membranes, and has an irritating, dehydrating effect on overexposed tissues.

Overexposure to Ethanol by skin absorption, inhalation or ingestion may have a narcotic effect (headache, nausea, drowsiness). Ethanol is metabolized to Acetaldehyde and Acetic acid resulting in metabolic acidosis, CNS depression, death due to respiratory arrest.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS
Cyanopropyltriethoxysilane	1067-47-6

## 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:** 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:** 92°C (198°F) (Closed cup)

**EXTINGUISHING MEDIA:** Water, CO<sub>2</sub>, foam, dry chemical

**FIRE FIGHTING EQUIPMENT:** Fire Fighters must wear positive- pressured, self-contained breathing apparatus and full protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Absorb spilled material with suitable chemical binder. Shovel absorbent into suitable waste container. Do not contaminate soil, groundwater, or surface water.

**SPECIAL PROTECTIVE EQUIPMENT:** Wear appropriate personal protective equipment as specified in section 8.

## 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. Maintain tightly closed container. Store away from alkaline, acidic, and oxidizing materials. 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.

**SKIN:** Use impervious gloves

**RESPIRATORY:** Local exhaust required, Mechanical ventilation required

In case of exposure, use appropriate NOISH approved respiratory protection

**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

**COLOR:** Colorless to yellow

**VAPOR DENSITY:** > 1

**BOILING POINT:** 80°C / .06 mm

**FLASH POINT AND METHOD:** 92°C (198°F) (Closed cup)

**SOLUBILITY IN WATER:** Reacts

**DENSITY:** 0.966 at 25°C

**SPECIFIC GRAVITY:** 0.961

**MOLECULAR WEIGHT:** 231.36

## 10. STABILITY AND REACTIVITY

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

**POLYMERIZATION:** Hazardous polymerization will not occur

**CONDITIONS TO AVOID:** Contact with water or moist air, Generates Ethanol; TLV (TWA)= 1000ppm.

**INCOMPATIBLE MATERIALS:** Acid and Oxidizing agents

## 11. TOXICOLOGICAL INFORMATION

### CARCINOGENICITY

**IARC:** No

**NTP:** No

**OSHA:** No

**COMMENTS:** No information

Material generates Ethanol on hydrolysis

Ethanol: Toxicity Data: orl-chd LDlo: 2000pmm; orl-man TDLo: 1.43ppm; ihl-rat LC50: 20,000ppm; skn-rbt LDLo: 20,000ppm.

Irritation Data: eye-hmn 20ppm; skn-rbt 500 mg/ 24 hours SEV.

## 12. ECOLOGICAL INFORMATION

**COMMENTS:** No information available

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Incineration is recommended . Treat or dispose of waste material in accordance with all local, state/provincial and national requirements.

**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:** Combustible liquid, N.O.S.

**TECHNICAL NAME:** (Cyanopropyltriethoxysilane)

**UN/NA NUMBER:** 1993

**PACKING GROUP:** III

**NAERG:** 27

## 15. REGULATORY INFORMATION

### UNITED STATES

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

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

#### REGULATIONS

**STATE REGULATIONS:** Pennsylvania Right to Know Components: 4-(triethoxysilyl) butyronitrile [1067-47-6]

New Jersey Right to Know Components: 4-(triethoxysilyl) butyronitrile [1067-47-6]

**CANADA**

**DOMESTIC SUBSTANCE LIST (INVENTORY):** 4-(triethoxysilyl) butyronitrile [1067-47-6]

**16. OTHER INFORMATION**

**APPROVED BY:** Office of Environmental Health Safety & Security      **TITLE:** Dir. of Env. Health Safety & Security

**PREPARED BY:** jnm

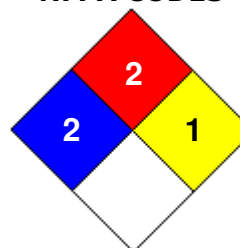
**INFORMATION CONTACT:** jtelepchak@unitedchem.com

**REVISION SUMMARY:** New MSDS

**HMIS RATING**

<b>HEALTH:</b>	*	<b>2</b>
<b>FLAMMABILITY:</b>		<b>2</b>
<b>PHYSICAL HAZARD:</b>		<b>1</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.

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

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