

MATERIAL SAFETY DATA SHEET



Date Issued: 08/18/2010
MSDS No: 2010.194

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: C3450
PRODUCT FORMULATION NAME: Cyanopropylmethyldichlorosilane
MOLECULAR FORMULA: C₅H₉Cl₂NSi

MANUFACTURER

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

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Product Stewardship: 215-781-9255
ex141
Service Number: 717-247-0896

24 HR. EMERGENCY TELEPHONE NUMBERS

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

2. HAZARDS IDENTIFICATION

HAZARD DESIGNATION

"C" - Corrosive

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear to light 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: * Conjunctivitis, corneal damage. Corrosive- causes tissue destruction

SKIN: *Irritant. May be harmful. Avoid contact .

INGESTION: May cause chemical burns. Harmful. Avoid contact

INHALATION: Corrosive - causes tissue distruction. May be harmful. Avoid Contact

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: Liquid and vapors react with moisture on the skin, eyes and mucous membranes to release hydrogen chloride (corrosive)

Prolonged or repeated exposure and/or high concentrations of vapors will produce chemical burns and destruction of affected tissues. Respirable vapors or mist 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. Prolonged or widespread contact may result in the absorption of potentially harmful amount of material. If ingested, this material may cause severe burns of the mouth, pharynx, esophagus and stomach

Contact of the skin, eyes and mucous membranes with Diemthylamine may lead to severe

inflammation, blistering, epidermal necrosis, and possible ulceration of exposed tissue.

Symptoms of exposure may be a burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting possibly leading to loss of consciousness and death.

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
Cyanopropylmethyldichlorosilane	1190-16-5

4. FIRST AID MEASURES

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

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

SKIN: Remove contaminated clothing and shoes. Wipe of excess chemical VERY GENTLY and WITHOUT DELAY and wash affected area under the shower with mild soap.

INGESTION: Give one full cup of milk or water to dilute ingested material.

!!!!!!! Get medical attention Immediately!!!!

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 (TAG)

GENERAL HAZARD: CAUTION: After fire has been extinguished with non-aqueous media, it may be easily reignited. make sure re-ignition does not occur

EXTINGUISHING MEDIA: Alcohol Foam, dry chemical, CO₂.

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

COMMENTS: WARNING: Use only dry media to extinguish flames. Water spray or fog should only be used to knock down Hydrogen Chloride vapors.

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 wasted container before transporting it for disposal. Keep all sources of ignition away from the spill area until cleaned -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 by directing the spray into the fume cloud as it travels away from the spill

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.

COMMENTS: CAUTION: NEVER direct the hose stream onto an unignited spill

7. HANDLING AND STORAGE

HANDLING: Container requires grounding during use.

STORAGE: Store in a cool and dry place. Maintain nitrogen blanket and tightly closed container. Protect from moisture. Protect from heat, direct sunlight and source of ignition. 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 and face shield.

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

RESPIRATORY: Local Exhaust required. Explosion- proof mechanical ventilation required.

If exposure exceeds TVL, use appropriate NIOSH approved respiratory

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, hydrochloric acid- like odor

COLOR: Clear to light yellow.

VAPOR DENSITY: > 1

BOILING POINT: 79°C /1 mm

FLASH POINT AND METHOD: 92°C (TAG)

SOLUBILITY IN WATER: Reacts

DENSITY: 1.150 at 20°C

SPECIFIC GRAVITY: 1.220

MOLECULAR WEIGHT: 182.12

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 alcohols. Generates Hydrogen Chloride; TLV=C5ppm. Contact with air, heat, sparks or other sources of ignition

HAZARDOUS DECOMPOSITION PRODUCTS: Fumes of chlorine, cyanide and nitrogen oxides will be emitted when this product is heated to decomposition.

INCOMPATIBLE MATERIALS: oxidizing agents, alkali and acid

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: 1490 mg/kg- rabbit

Notes: 100 ug/ 24 H open- rabbit

ORAL LD₅₀: 2830 mg/kg- Rat

NOTES: Organic material containing the Cyano- group can be partially metabolized to yield Cyanide in vivo. Long term exposure to the material may possibly lead to cardiovascular and/or nervous system effects

CARCINOGENICITY

IARC: No

NTP: No

OSHA: No

COMMENTS:

Material generates Hydrogen Chloride on contact with water and alcohols.

Hydrochloric Acid (aqueou): 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/m3/ 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

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: Chlorosilanes, n.o.s.

TECHNICAL NAME: (Cyanopropylmethyldichlorosilane)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: 2987

PACKING GROUP: II

LABEL: Corrosive

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.

EUROPEAN COMMUNITY

EEC LABEL SYMBOL AND CLASSIFICATION

"C" - Corrosive

R-Phrases:

R34- Causes burns

S-Phrases:

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S27- Take off immediately all contaminated clothing

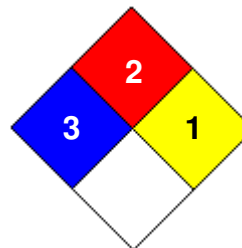
S28- After contact with skin, wash immediately with plenty of mild soap and water

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection

S45- In case of accident or if you feel unwell, seek medical advice immediately (Show label when possible)

INTERNATIONAL REGULATIONS**(WGK) CLASSIFICATION: 3****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**

HEALTH:	3
FLAMMABILITY:	2
PHYSICAL HAZARD:	1
PERSONAL PROTECTION:	

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.

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