

MATERIAL SAFETY DATA SHEET

RECORD NO.: P488

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SECTION 1. NAME AND PRODUCT

O9750

NAME: O9750

SYNONYMS: n-Octadecyltrichlorosilane

CAS REG.NO.: 0000112-04-9 FORMULA: C18H37Cl3Si

SECTION 2. HAZARDOUS INGREDIENTS

O9750

COMPONENT

ACGIH TLV

OSHA PEL

n-Octadecyltrichlorosilane [112-04-9]

NA

NA

LEGEND:

- (+) This chemical is subject to the reporting requirements of SARA Title III Section 313 and 40CFR Part 372, and is potentially at the maximum concentration listed.
- (++) SARA Title III Section 302 Extremely Hazardous Substance
- (+++)
[00000-00-0] CERCLA Hazardous Substance
Chemical Abstracts Services Registry Number.

If no marks appear with a listed ingredient, then the ingredient is not included in any of the regulatory categories appearing in the Legend of this Material Safety Data Sheet.

SECTION 3. PHYSICAL DATA

O9750

APPEARANCE: Clear liquid

B.PT.(deg.C/mm): 160/3

VAPOR PRESSURE(mm/deg.C): <5/20

M.PT.(deg.C): NA

VAPOR DENSITY(AIR=1): >1

% SOLUBLE IN WATER: Reacts

SPECIF.GRAVITY: 0.95

% VOLATILE BY VOLUME: NA

SECTION 4. FIRE AND EXPLOSION HAZARD

O9750

FLASH POINT: 137 C (277 F) estimated

FLAMMABLE LIMITS (STP IN AIR)

LOWER LIMITS: 0.42%

UPPER LIMITS: NA

FIRE EXTINGUISHING MEDIA: 'Alcohol' foam, dry chemical, CO2.

Use of high expansion foam (100:1) is recommended to cover flames.

WARNING: Use only dry media to extinguish flames. Water spray or fog should only be used to knock down Hydrogen Chloride vapors in areas downwind from the fire.

PERSONAL PROTECTION FOR FIGHTING FIRE: Fire fighters must wear positive-

pressure, self-contained breathing apparatus and full protective clothing.

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SECTION 5. REACTIVITY DATA

O9750

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STABILITY (UNDER NORMAL CONDITIONS): Stable

CONDITIONS TO AVOID:

Contact with water or alcohols

Generates hydrogen chloride; TLV=C5ppm

Contact with oxidizing agents.

Contact with alkali & acid.

Contact with air.

Contact with amines.

Avoid contact with Lewis acids such as Iron trichloride or

Aluminum trichloride unless under carefully controlled reaction conditions and allow for the generation of gaseous products.

HAZARDOUS POLYMERIZATION: Can occur

CONDITIONS TO AVOID:

Contact with water or moist air.

Exposure to heat.

Contact with oxidizing agents.

Contact with primary amines or ammonia.

DANGER: Polymerization is accompanied by generation of large volumes of Hydrogen Chloride gas (corrosive) that may result in a violent release of pressure and heat if reaction occurs in a confined space.

HMIS RATINGS (Scale 0-4)

HEALTH: 3

FLAMMABILITY: 1

REACTIVITY: 1

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SECTION 6. SPILL OR LEAK PROCEDURES

O9750

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IN CASE OF SPILL:

Absorb spilled material with suitable chemical binder.

Shovel absorbent into suitable waste container.

Neutralize washings with soda ash or lime. Do not contaminate soil, groundwater, or surface water.

(1) Small Spills;

Evacuate spill area of all non-essential personnel, ventilate the spill area, cover liquid completely (smother) with dry sodium bicarbonate. Place absorbed material in a dry, lined waste container before transporting it for disposal.

(2) Large Spills;

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.

CAUTION: NEVER direct the hose stream into an unignited spill.

DISPOSAL METHOD:

Incinerate. Follow all federal, state, and local regulations.

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SECTION 7. HEALTH HAZARD DATA

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O9750

TOXICITY:

Octadecyltrichlorosilane:
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: 1108ppm/ 1 Hour; ihl-mam LCLo:
1000mg/m3/ 2 Hours; orl-rbt LD50: 900mg/kg.

Hydrogen Chloride (gas):

Toxicity Data; ihl-rat LC50: 5660ppm/ 30 Minutes; ihl-mus LC50: 2142ppm/ 30
Minutes.

ROUTES AND EFFECTS OF EXPOSURE:

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

SEE NOTE(S) BELOW.

SKIN: *Causes severe chemical burns. Corrosive-causes tissue destruction.

SEE NOTE(S) BELOW.

INHALATION: *Causes severe chemical burns. Corrosive-causes tissue destruction.

SEE NOTE(S) BELOW.

INGESTION: *Causes severe chemical burns. Corrosive-causes tissue destruction.

SEE NOTE(S) BELOW.

NOTE:

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.

NOTE:

Liquid and vapors react with moisture on the skin, eyes, and mucous membranes to release Hydrogen Chloride which is severely irritating to these tissues. Prolonged or repeated exposure and/or high concentrations of vapors will produce chemical burns and destruction of affected tissues. Respirable 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. Prolonged or widespread contact may result in the absorption of potentially harmful amounts of material. If ingested, this material may cause severe burns of the mouth, pharynx, esophagus, and stomach.

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

FIRST AID PROCEDURES:

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

!!!GET MEDICAL ATTENTION IMMEDIATELY!!!

SKIN: Remove contaminated clothing and shoes

SKIN: Wipe off excess chemical VERY GENTLY and WITHOUT DELAY
and wash affected area under the shower with mild soap.

INHALATION: Remove victim to fresh air
INHALATION: Give CPR or oxygen if necessary
INGESTION: Get medical attention
INGESTION: Give one full cup of milk or water to dilute ingested material
INGESTION: If possible, give victim a full glass of (a) milk ad libitum, or (b) milk of magnesia or other antacid preparation, or (c) emollients such as table oil or fresh eggs.
INGESTION: Treat for shock.

Note to Emergency Medical Technician/Physician:

EYES: If pain persists, repeat washing the eye for 15 minutes or until the pain is relieved or until the pH of the eye returns to normal as tested with litmus paper.
EYES: If great pain persists, place one (1) drop Benoxinate solution (0.4%) in the affected eyes(s).

SKIN: Dust affected area with powdered sodium bicarbonate, wash affected area again under the shower with mild soap, rinse with tepid water, and dry the skin gently with a clean, dry towel.

INHALATION: To relieve coughing, have victim inhale from a gauze pad soaked with a few drops of ethyl alcohol or diethyl ether and administer positive pressure oxygen.

---If symptoms persist, get medical attention---

---Never give anything by mouth to an unconscious person---

CARCINOGEN STATUS: NTP?: No IARC MONOGRAPH?: No OSHA REGULATED?: No

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SECTION 8. SPECIAL PROTECTION INFORMATION 09750

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VENTILATION:

Local exhaust required
Explosion-proof mechanical ventilation required

RESPIRATORY PROTECTION:

In case of exposure, use appropriate NIOSH approved respiratory protection

PROTECTIVE CLOTHING:

Use impervious gloves
Use impervious clothing as necessary to protect against skin contact

EYE PROTECTION:

Use chemical goggles and face shield

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SECTION 9. PRECAUTIONS OR OTHER COMMENTS 09750

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HANDLING AND STORAGE:

Store in a cool and dry place
Provide adequate ventilation
Protect from moisture
Store away from alkaline materials
Store away from acidic materials
Store away from oxidizing materials
Maintain tightly closed container

PROPER SHIPPING NAME: Octadecyltrichlorosilane
HAZARD CLASS: 8 ID NO.: UN1800 PACKING GROUP: II ERG: 60
HAZARD LABEL(S): Corrosive

Since empty containers retain product residue, follow hazard precautions even after container is emptied.

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