Material Safety Data Sheet

SECTION 1. NAME AND PRODUCT

NAME: T2492
SYNONYMS: Tridecafluoroctyltrichlorosilane
CAS REG. NO: 78560-45-9
FORMULA: C₈H₄Cl₃F₁₃Si

SECTION 2. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>AMOUNT</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tridecafluoroctyltrichlorosilane</td>
<td>100%</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

(+): 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.

(++): CERCLA Hazardous Substance

[00000-00-0]: 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

Appearance: Colorless to pale pink liquid. Sharp acidic odor.
B.P. (deg. C/mm): 192
M.PT (deg. C): NA
VAPOR PRESSURE (mm/deg.C): NA
% VOLATILE BY VOLUME: NA
VAPOR DENSITY (AIR=1): >1
SOLUBLE IN WATER: Reacts
SPECIF. GRAVITY: 1.3

SECTION 4. FIRE AND EXPLOSION HAZARD

FLASH POINT: (deg. C) >34C
FLAMMABLE LIMITS: (STP IN AIR)
LOWER LIMITS: NA
UPPER LIMITS: NA
FIRE EXTINGUISHING MEDIA: CO₂, foam, dry chemical

Water spray or fog.

PERSONAL PROTECTION FOR FIGHTING FIRE: Fire fighters must wear positive-pressure, self-contained breathing apparatus and full protective clothing.
SECTION 5. REACTIVITY DATA

STABILITY (UNDER NORMAL CONDITIONS): Stable.
CONDITIONS TO AVOID:
- Contact with water or alcohols.
- Generates hydrogen chloride; TLV=C5ppm.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID:
- NA
HMIS RATING: (scale 0-4)
  HEALTH: 3  Flammability: 1  Reactivity: 2

SECTION 6. SPILL OR LEAK PROCEDURES

IN CASE OF SPILL:
- Absorb spilled material with suitable chemical binder.
- Shovel absorbent into suitable waste container.
- Do not contaminate soil, groundwater, or surface water.
DISPOSAL METHOD:
- Incinerate. Follow all federal, state, and local regulations.

SECTION 7. HEALTH AND HAZARD DATA

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

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

ROUTES AND EFFECTS OF EXPOSURE:

EYES: *Corrosive-causes tissue destruction.
  SEE NOTE(S) BELOW.
SKIN: *Corrosive-causes tissue destruction.
  SEE NOTE(S) BELOW.
INHALATION: *Causes irritation or damage to lung.
  SEE NOTE(S) BELOW.
INGESTION: *Corrosive-causes tissue destruction.
  SEE NOTE(S) BELOW.

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.

FIRST AID PROCEDURES:

EYES: Flush with clean water for at least 15 minutes and consult a physician.
SKIN: Scrub with soap and water.
SKIN: Remove contaminated clothing and shoes.
INHALATION: Remove victim to fresh air.
INHALATION: Give CPR or oxygen if necessary.
INGESTION: Do not induce vomiting.
INGESTION: Get medical attention.

---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 T2492
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VENTILATION:
   Local exhaust recommended.
   Mechanical ventilation recommended.
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.
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SECTION 9. PRECAUTIONS OR OTHER COMMENTS T2492
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HANDLING AND STORAGE:
   Store in a cool and dry place.
   Store away from alkaline materials.
   Store away from acidic materials.
   Store away from oxidizing materials.

PROPER SHIPPING NAME: Chlorosilanes, n.o.s.
TECHNICAL NAME: (Tridecafluorooctyltrichlorosilane)
HAZARD CLASS: 8 ID NO.: UN2987 PACKING GROUP: II ERG: 60
HAZARD LABEL(S): Corrosive

Since empty containers retain product residue, follow hazard precautions even after container is emptied.
NA= No applicable or relevant information available
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Prepared by UCT Environmental & Safety Department
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