# Material Safety Data Sheet

## Chloro-dimethyl-(pentafluorophenyl)-silane, 98%

ACC# 82184

## Section 1 - Chemical Product and Company Identification

MSDS Name: Chloro-dimethyl-(pentafluorophenyl)-silane, 98% Catalog Numbers: AC210130000, AC210130010, AC210130050

Synonyms: Flophemesyl chloride; (Pentafluorophenyl)dimethylchlorosilane; Silane, chlorodimethyl(pentafluorophenyl)-

Company Identification:
Acros Organics N.V.
One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
20082-71-7	Chloro-dimethyl-(pentafluorophenyl)-silane	98	243-506-9

### Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Appearance: clear, colorless clear liquid. Flash Point: 20 deg C.

**Danger!** Corrosive. Causes eye and skin burns. **Flammable liquid and vapor.** May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. May cause central nervous system depression. Moisture sensitive

Target Organs: Central nervous system.

#### **Potential Health Effects**

Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.

**Skin:** Causes skin burns. May cause cyanosis of the extremities. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

**Ingestion:** May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. Ingestion of large amounts may cause CNS depression. May cause systemic effects.

**Inhalation:** Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

Chronic: Effects may be delayed.

## Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes). **Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician: Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT get water inside containers. Do NOT use straight streams of water. In case of fire, use carbon dioxide, dry chemical powder or appropriate foam.

Flash Point: 20 deg C ( 68.00 deg F) Autoignition Temperature: Not applicable. Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 3; Instability: 0

### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Cover with sand, dry lime or soda ash and place in a closed container for disposal. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Do not get water inside containers. A vapor suppressing foam may be used to reduce vapors.

## Section 7 - Handling and Storage

**Handling:** Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Use and store under nitrogen. Do not allow contact with water. Use only in a chemical fume hood. Discard contaminated shoes. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam. Do not breathe vapor.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Keep containers tightly closed. Store protected from moisture.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs		
Chloro-dimethyl- (pentafluorophenyl)-silane	none listed	6 mg/m3 TWA (listed under Silica, amorphous).3000 mg/m3 IDLH (listed under Silica, amorphous).	none listed		

OSHA Vacated PELs: Chloro-dimethyl-(pentafluorophenyl)-silane: No OSHA Vacated PELs are listed for this chemical.

#### **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Appearance: clear, colorless
Odor: None reported

**Odor:** None reported. **pH:** Not available.

Vapor Pressure: Not available.

Vapor Density: 8.99

Evaporation Rate: Not available.

Viscosity: Not available.

**Boiling Point:** 88.0 - 90.0 deg C @ 10.00mmHg **Freezing/Melting Point:**Not available. **Decomposition Temperature:**Not available.

Solubility: Not available.

Specific Gravity/Density:1.3840g/cm3 Molecular Formula:C8H6ClF5Si Molecular Weight:260.66

## Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Moisture sensitive.

**Conditions to Avoid:** Incompatible materials, ignition sources, moisture, excess heat, strong oxidants. **Incompatibilities with Other Materials:** Moisture, strong oxidizing agents, strong acids, water.

Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, carbon dioxide, hydrogen fluoride gas, silicon dioxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

RTECS#:

CAS# 20082-71-7 unlisted.

LD50/LC50:

Not available

### Carcinogenicity:

CAS# 20082-71-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: No information found Reproductive Effects: No information found Mutagenicity: No information found Neurotoxicity: No information found

Other Studies:

## Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

**Environmental:** No data available. **Physical:** No data available.

Other: None.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG	
Shipping Name:	DOT regulated - small quantity provisions apply (see 49CFR173.4)	No information available.	
Hazard Class:			
UN Number:			
Packing Group:			

## Section 15 - Regulatory Information

#### **US FEDERAL**

#### **TSCA**

CAS# 20082-71-7 is listed on the TSCA inventory.

#### **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

## **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

## **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

### **CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

### **SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**Section 313** No chemicals are reportable under Section 313.

#### **Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

## Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

## STATE

CAS# 20082-71-7 can be found on the following state right to know lists: California, (listed as Silica, amorphous), New Jersey, (listed as Silica, amorphous), Pennsylvania, (listed as Silica, amorphous), Minnesota, (listed as Silica, amorphous), Massachusetts, (listed as Silica, amorphous).

## California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

## **European/International Regulations**

**European Labeling in Accordance with EC Directives** 

### **Hazard Symbols:**

FC

## Risk Phrases:

R 10 Flammable.

R 11 Highly flammable.

R 34 Causes burns.

#### **Safety Phrases:**

S 16 Keep away from sources of ignition - No smoking.

S 36/37 Wear suitable protective clothing and gloves.

### WGK (Water Danger/Protection)

CAS# 20082-71-7: No information available.

### Canada - DSL/NDSL

CAS# 20082-71-7 is listed on Canada's NDSL List.

#### Canada - WHMIS

This product has a WHMIS classification of B2, E.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

#### **Canadian Ingredient Disclosure List**

CAS# 20082-71-7 (listed as Silica, amorphous) is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 9/02/1997 **Revision #7 Date:** 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.