# SIGMA-ALDRICH

## **Material Safety Data Sheet**

Version 5.0 Revision Date 10/03/2012 Print Date 01/16/2014

1. PRODUCT AND COMPANY IDENTIFICATION			
Product name	:	Chloro(dimethyl)octadecylsilane	
Product Number Brand	:	289108 Aldrich	
Supplier	:	Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA	
Telephone	:	+1 800-325-5832	
Fax	:	+1 800-325-5052	
Emergency Phone # (For both supplier and manufacturer)	:	(314) 776-6555	
Preparation Information	:	Sigma-Aldrich Corporation Product Safety - Americas Region 1-800-521-8956	

### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

OSHA Hazards Corrosive

### GHS Classification

Skin corrosion (Category 1B) Serious eye damage (Category 1)

### GHS Label elements, including precautionary statements

Pictogram	

	•
Signal word	Danger
Hazard statement(s) H314	Causes severe skin burns and eye damage.
Precautionary statement(s) P280 P305 + P351 + P338	Wear protective gloves/ protective clothing/ eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
HMIS Classification	
Health hazard:	3
Flammability:	1
Physical hazards:	0
NFPA Rating	
Health hazard:	3
Fire:	1
Reactivity Hazard:	0
Special hazard.:	W
Potential Health Effects	

Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	May be harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye burns.
Ingestion	May be harmful if swallowed.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms	: Dimethyloctadecylchlorosilane Octadecyldimethylchlorosilane		
Formula	: C <sub>20</sub> H <sub>43</sub> ClSi		
Molecular Weight	: 347.09 g/mol		
Component		Concentration	
Chlorodimethyloctadecylsilane			
CAS-No.	18643-08-8	-	
EC-No.	242-472-2		

### 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### **5. FIREFIGHTING MEASURES**

### **Conditions of flammability**

Not flammable or combustible.

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, silicon oxides

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive. Store under inert gas.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

	•	
	Form	solid
	Colour	no data available
Sa	afety data	
	рН	no data available
	Melting point/freezing point	Melting point/range: 28 - 30 °C (82 - 86 °F) - lit.
	Boiling point	145 - 155 °C (293 - 311 °F) at 0.007 hPa (0.005 mmHg) - lit.
	Flash point	200 °C (392 °F) - closed cup
	Ignition temperature	no data available
	Autoignition temperature	no data available
	Lower explosion limit	no data available
	Upper explosion limit	no data available
	Vapour pressure	no data available
	Density	no data available
	Water solubility	no data available

Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available

### **10. STABILITY AND REACTIVITY**

### **Chemical stability**

Stable under recommended storage conditions.

## Possibility of hazardous reactions no data available

**Conditions to avoid** Avoid moisture.

Materials to avoid Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, silicon oxides Other decomposition products - no data available

### **11. TOXICOLOGICAL INFORMATION**

### Acute toxicity

Oral LD50 no data available

Inhalation LC50 no data available

Dermal LD50 no data available

Other information on acute toxicity no data available

### Skin corrosion/irritation

no data available

## Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### **Reproductive toxicity**

no data available

### Teratogenicity

no data available

## Specific target organ toxicity - single exposure (Globally Harmonized System) no data available

## Specific target organ toxicity - repeated exposure (Globally Harmonized System) no data available

## Aspiration hazard no data available

### Potential health effects

Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye burns.

### Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting

Synergistic effects no data available

Additional Information RTECS: Not available

### **12. ECOLOGICAL INFORMATION**

### Toxicity

no data available

### Persistence and degradability

no data available

## **Bioaccumulative potential** no data available

Mobility in soil no data available

### PBT and vPvB assessment

no data available

### Other adverse effects

no data available

### **13. DISPOSAL CONSIDERATIONS**

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 2987 Class: 8 Packing group: II Proper shipping name: Chlorosilanes, corrosive, n.o.s. Marine pollutant: No Poison Inhalation Hazard: No

### IMDG

UN number: 2987 Class: 8 Packing group: II Proper shipping name: CHLOROSILANES, CORROSIVE, N.O.S. Marine pollutant: No EMS-No: F-A, S-B

### ΙΑΤΑ

UN number: 2987 Class: 8 Packing group: II Proper shipping name: Chlorosilanes, corrosive, n.o.s. IATA Passenger: Not permitted for transport

### **15. REGULATORY INFORMATION**

### **OSHA Hazards**

Corrosive

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Chlorodimethyloctadecylsilane	CAS-No. 18643-08-8	Revision Date
New Jersey Right To Know Components		Devision Data
Chlorodimethyloctadecylsilane	CAS-No. 18643-08-8	Revision Date

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### **16. OTHER INFORMATION**

### **Further information**

Copyright 2012 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.