

Material Safety Data Sheet

Octadecyltrichlorosilane, 95%

ACC# 21907

Section 1 - Chemical Product and Company Identification

MSDS Name: Octadecyltrichlorosilane, 95%

Catalog Numbers: AC147400000, AC147400250, AC147401000

Synonyms: Trichlorooctadecylsilane; Silane, octadecyltrichloro-; Silane, trichlorooctadecyl-

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
112-04-9	Octadecyltrichlorosilane		203-930-7

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: brown clear liquid. Flash Point: 89 deg C.

Danger! Corrosive. Causes eye and skin burns. **Combustible 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. Air sensitive. Moisture sensitive.

Target Organs: Central nervous system, respiratory system, eyes, skin.

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. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause perforation of the digestive tract. May cause systemic effects.

Inhalation: Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Aspiration may lead to pulmonary edema. May cause systemic effects. May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation at high concentrations may cause CNS depression and asphyxiation.

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 immediately. 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. 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. Combustible liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Substance may react with water, and may release corrosive and/or toxic gases. Containers may explode when heated.

Extinguishing Media: Use foam, dry chemical, or carbon dioxide. DO NOT USE WATER!

Flash Point: 89 deg C (192.20 deg F)

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: 40 vol %

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 2; Instability: 2

Section 6 - Accidental Release Measures

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

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Place under an inert atmosphere. Do not get water inside containers.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not ingest or inhale. Handle under an inert atmosphere. Do not allow contact with water. Use only in a chemical fume hood. Store and handle protected from air. 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.

Storage: Keep away from heat, sparks, and flame. Store in a tightly closed container. Keep under a nitrogen blanket. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Do not expose to air. 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
Octadecyltrichlorosilane	none listed	none listed	none listed

OSHA Vacated PELs: Octadecyltrichlorosilane: 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: colorless - light yellow - brown

Odor: pungent odor

pH: Not available.

Vapor Pressure: < 5 mm Hg @ 20 deg

Vapor Density: >1 (air=1)

Evaporation Rate: <1 (ether=1)

Viscosity: Not available.

Boiling Point: 223 deg C @ 10.00mm

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: decomposes in water

Specific Gravity/Density: 0.9840g/cm³

Molecular Formula: CH₃(CH₂)₁₇SiCl₃

Molecular Weight: 387.94

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, moisture, exposure to air, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials: Air, moisture, water, strong acids, strong bases, strong oxidizing agents.

Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, silicon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 112-04-9 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 112-04-9: 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

No information available.

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:	OCTADECYLTRICHLOROSILANE	OCTADECYLTRICHLOROSILANE
Hazard Class:	8	8
UN Number:	UN1800	UN1800
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 112-04-9 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 depleters.

This material does not contain any Class 2 Ozone depleters.

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# 112-04-9 can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts.

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:

C

Risk Phrases:

R 34 Causes burns.

Safety Phrases:

S 25 Avoid contact with eyes.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 112-04-9: No information available.

Canada - DSL/NDSL

CAS# 112-04-9 is listed on Canada's NDSL List.

Canada - WHMIS

This product has a WHMIS classification of B3, E, F.

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# 112-04-9 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 9/02/1997

Revision #8 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.