

Material Safety Data Sheet

Silicon (IV) Chloride, 99.8+ %

ACC# 95569

Section 1 - Chemical Product and Company Identification

MSDS Name: Silicon (IV) Chloride, 99.8+%

Catalog Numbers: AC201160000, AC201160500, AC201165000

Synonyms: Silicon Tetrachloride; Tetrachlorosilane

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
10026-04-7	Silicon (IV) Chloride	99.8+%	233-054-0

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid.

Danger! Water-reactive. Corrosive. May cause eye irritation and possible burns. Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. May cause severe respiratory and digestive tract irritation with possible burns. Moisture sensitive.

Target Organs: None known.

Potential Health Effects

Eye: Contact with eyes may cause severe irritation, and possible eye burns.

Skin: Contact with skin causes irritation and possible burns, especially if the skin is wet or moist.

Ingestion: May cause burns to the digestive tract.

Inhalation: May cause respiratory tract irritation. Causes chemical burns to the respiratory tract.

Chronic: No information found.

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.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do NOT induce vomiting and seek IMMEDIATE MEDICAL ADVICE.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen.

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. Water Reactive. Material will react with water and may release a flammable and/or toxic gas. Substance is noncombustible. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media: DO NOT USE WATER! For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: Not published.

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. Do not expose spill to water.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Do not allow contact with water.

Storage: Store in a cool, dry place. Store in a tightly closed container. Keep under a nitrogen blanket.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Silicon (IV) Chloride	none listed	6 mg/m ³ TWA (listed under Silica, amorphous).3000 mg/m ³ IDLH (listed under Silica, amorphous).	none listed

OSHA Vacated PELs: Silicon (IV) Chloride: 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: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear, colorless

Odor: Pungent, suffocating odor

pH: Not available.

Vapor Pressure: 257 mbar @ 20 C

Vapor Density: 5.86 (air=1)

Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: 57.6 deg C @ 760.00mm Hg

Freezing/Melting Point:-70 deg C

Decomposition Temperature:Not available.

Solubility: reacts

Specific Gravity/Density:1.4830g/cm³

Molecular Formula:Cl₄Si

Molecular Weight:169.90

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: High temperatures, exposure to moist air or water.

Incompatibilities with Other Materials: Metals, strong acids, strong bases, glass.

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

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 10026-04-7: VW0525000

LD50/LC50:

CAS# 10026-04-7:

Draize test, rabbit, eye: 20 mg/24H Moderate;

Draize test, rabbit, skin: 500 mg/24H Severe;

Inhalation, rat: LC50 = 8000 ppm/4H;

Carcinogenicity:

CAS# 10026-04-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Not available.

Teratogenicity: Not available.

Reproductive Effects: Not available.

Neurotoxicity: Not available.

Mutagenicity: Not available.

Other Studies: Not available.

Section 12 - Ecological Information

Ecotoxicity: No data available. Water danger/protection: WGK 1Toxic for aquatic organisms: LD50 1000-100 mg/l/96hrReaction forms

Hydrochloric acid: 25 mg/l is lethal to fish.

Environmental: No information available.

Physical: No information available.

Other: 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:	SILICON TETRACHLORIDE	SILICON TETRACHLORIDE
Hazard Class:	8	8
UN Number:	UN1818	UN1818
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 10026-04-7 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 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# 10026-04-7 can be found on the following state right to know lists: California, (listed as Silica, amorphous), New Jersey, 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:

XI

Risk Phrases:

R 14 Reacts violently with water.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 7/8 Keep container tightly closed and dry.

WGK (Water Danger/Protection)

CAS# 10026-04-7: 1

Canada - DSL/NDSL

CAS# 10026-04-7 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of E, F.

Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 10/28/1997

Revision #2 Date: 3/18/2003

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.