
Organosilane C301****** SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/
UNDERTAKING******SDS Name: **Organosilane C301**

Chemical Name: 3-Chloropropyltrimethoxysilane, 98.5%

Synonym(s): 3-Trimethoxysilylpropyl Chloride

IUPAC Name: 3-chloropropyl(trimethoxy)silane

Company Identification: Dalian Onichem Co., Ltd.

No. 2 Gaoxin Street, Qixianling, Dalian 116023, P.R. China

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For emergencies, call CHEMTREC 1-800-424-9300 or 1-202-483-7616

****** SECTION 2- HAZARDS IDENTIFICATION ********Emergency Overview**

It is dangerous. Harmful if swallowed. May cause blindness if swallowed. Cause eye and skin irritation. May cause drowsiness or dizziness. Combustible liquid and vapour.

Appearance: Colorless to light yellowish liquid.

Odor: Amine-like

Potential Health Effects**Eye:** Corrosive. May cause irreversible damage and burns to the eyes.**Skin:** Cause irritation. May cause discomfort or pain, local redness, possible swelling.**Ingestion:** Based on animal data, this product contain a low order of acute oral toxicity.**Inhalation:** May cause respiratory tract irritation. The hazards of this material have not been fully investigated; ingestion may be hazardous.**Aggravated Medical Conditions:** May aggravate: Pre-existing liver or kidney disorders.**Chronic Health Hazard:**

The product generates methanol on hydrolysis. Methanol is harmful if inhaled or absorbed through skin; causes damage to liver, kidney and nervous system; causes eye, skin, nose and throat irritation; may be fatal or cause blindness if swallowed; cannot be made non-poisonous

****** SECTION 3- COMPOSITION, INFORMATION ON INGREDIENTS ******

Ingredient	CAS#	Content
3-(trimethoxysilyl)propylamine	13822-56-5	98.5% min

****** SECTION 4 - FIRST AID MEASURES ********General information** Take persons to a safe place. Observe self-protection for first aid. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.**Eyes:** Immediately hold eyelids apart and flush with plenty of water for at least 15 min. Continue to bathe eyes during transport to medical practitioner.**Skin:** Immediately flush skin with plenty of water. Wash contaminated clothing before reuse. Get medical attention.**Inhalation:** Remove from exposure to fresh air immediately.**Ingestion:** If conscious, drink plenty of water. Do not induce vomiting. Consult a physician. immediately.**Indication of any immediate medical attention and special treatment needed:**

Product may hydrolyse upon contact with body fluids in the gastrointestinal tract to produce additional methanol; if required, therapy of irritative effect. Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear. If necessary, aspirate leftover substance.

Detection of substance(Methanol) possible in blood. Antidote treatment: Ethanol

MATERIAL SAFETY DATA SHEET

Date Updated: 01.06.2013
USA Version: 4.6

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**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan.

Suitable extinguishing Media: Use Alcohol-resistant foam, dry chemical, or carbon dioxide.

Further information: Do not direct a solid stream of water or foam into hot, burning pools: this may cause frothing and increase fire intensity. Cool closed containers exposed to fire with water spray.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

Flash Point: 82 °C (180°F)

Auto-ignition Temperature: 295°C (563°F)

Explosion Limits, Lower: N/A.

Upper: N/A.

HMIS Classification

NFPA Rating

Health 2

Health 2

Flammability 2

Fire 2

Physical hazard 2

Reactivity 2

Advice for firefighters: Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulation

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8. Keep out unprotected persons, ensure adequate ventilation.

Spills/Leaks: Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container, to be disposed of in compliance with existing regulations.

Environmental precautions: Do not flush into surface water, sanitary sewer system

**** SECTION 7 - HANDLING AND STORAGE ****

Handling: Provide good ventilation or extraction. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Wash hands after handling. Avoid inhalation of vapours and spray mists.

Storage: Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Protect from moisture

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment (PPE)

Eyes: Wear safety glasses and chemical goggles if splashing is possible.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations.

Hygiene measures: When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. Remove contaminated or saturated clothing. Wash contaminated clothing before re-use.

Protective measures: Handle in accordance with good industrial hygiene and safety practices. If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. Do not breathe in vapours or aerosols. Avoid contact with skin and eyes

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**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Appearance: Colorless to light yellowish liquid
Odor: Amine-like
pH: Over 9.0 for 20g/L solution @ 20°C
Vapor pressure: <1.33 hPa @ 20°C
Vapor Density: >1
Evaporation Rate: <1
Viscosity: 2 mPa.S @ 20°C
BP/BP range: 194°C
Freezing/Melting Point: < -60 °C
Decomposition Temperature: N/A.
Solubility: Reacts with water, hydrolyses.
Specific Gravity/Density: 1.014 g/cm³ @ 25°C
Molecular Formula: C₆H₁₇NO₃Si
Molecular Weight: 179.29

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability: If stored and handled in accordance with standard industrial practices, no hazardous reactions are known.

Conditions to avoid: Moisture, heat, open flames, and other sources of ignition. Vapours can form explosive mixtures with air.

Materials to Avoid: Reacts violently with water and acids to form heat and methanol.

Hazardous decomposition products: Methanol in case of hydrolysis, Carbon oxides, Oxides of silicon, Nitrogen Oxides under fire or very heat condition.

Hazardous Polymerization: Has not been reported

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

Acute oral toxicity: LD50 Rat: >2,000mg/kg
Acute dermal toxicity: LD50 Rabbit: >2,000mg/kg
Acute inhalation toxicity: Rat, No deaths, 6h
Skin irritation: Rabbit, Irritating, 72h
Eye irritation: Rabbit, strongly irritating.
Sensitization: Guinea pig: not sensitizing

**** SECTION 12 - ECOLOGICAL INFORMATION ****

The product degrades through hydrolysis into alcohols and silanol or siloxanol compounds.

Toxicity to fish: semi-static test LC50, Brachydanio rerio, >934 mg/l 96h

Toxicity to other organisms: static test LC50, Daphnia magna, 331 mg/l 48h

Toxicity to algae: static test EC50, green algae, >1,000 mg/l 72h

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.

Do not reuse empty containers and dispose of in accordance with the regulation issued by the appropriate local authorities. If there is product residue in the emptied container, follow directions for handling on the container's label

**** SECTION 14 - TRANSPORT INFORMATION ****

This product is not regulated as dangerous goods by CFR, ADR/RID, IATA/ICAO

D.O.T. Road/Rail: Class---Combustible Liquid Packing group---III UN-No 1993

Proper shipping name: Combustible liquid, n.o.s.

Technical Name: 3-Aminopropyltrimethoxysilane

IMDG Not classified as hazardous sea cargo.

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FOR USA ONLY: In packagings exceeding 450L, this product must be classified, placarded, marked and shipped as Combustible Liquid to the USA

**** SECTION 15 - REGULATORY INFORMATION ****

International regulations:

Listed on or in accordance with the following inventories

AICS – Listed/registered
EINECS - Listed/registered
ENCS - Listed/registered
IECSC - Listed/registered
KECL - Listed/registered
DSL - Listed/registered
PICCS - Listed/registered
TSCA - Listed/registered

US Regulatory Information

OSHA
None listed

Clean Air Act Section(112)
None listed

CERCLA Reportable Quantities
None listed

SARA(311,312) Hazard Class
Acute Health Hazard; Fire Hazard

SARA(313)Chemicals
None listed

TSCA
None listed

CALIFORNIA PROPOSITION 65
None listed

**** SECTION 16 - OTHER INFORMATION ****

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 way shall we 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 we have been advised of the possibility of such damages