

# SAFETY DATA SHEET

Date Updated: 01.10.2013  
Version: 5.0  
Regulation REACH (EC 1907/2006) & CLP (EC 1272/2008)

**ONICHEM**  
Onichem Specialities  
www.onichem.com

## ORGANOSILANE SCN302

### \*\*\*\* SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING\*\*\*\*

SDS Name: **Organosilane SCN302**  
Chemical Name: gamma-Thiocyanatopropyltriethoxysilane, 95%  
Synonym(s): 3-Thiocyanatopropyltriethoxysilane  
IUPAC Name: 3-triethoxysilylpropyl thiocyanate

REACH Pre-registration number: 17-2119456406-XX-0000

Use of substance/preparation: Manufacture and on-site use; Non-metal surface treatment; Laboratory reagent

Company Identification: Dalian Onichem Co., Ltd.  
No. 2 Gaoxin Street, Qixianling, Dalian 116023, P.R. China  
Tel: 86-411-84794022, Fax: 86-411-84794077  
Information contact: MSDS@onichem.com  
For emergencies, call CHEMTREC 1-800-424-9300 or 1-202-483-7616

### \*\*\*\* SECTION 2 - HAZARDS IDENTIFICATION \*\*\*\*

#### EU-GHS Classifications

Classifications below according to Regulation (EU) No 1272/2008 on classification, labelling and packaging of Substances and Mixtures (CLP).

Acute toxicity(oral)	Category 4	H302
Hazardous to the Aquatic Environment	Category 3	H412
---Chronic Hazard		

#### GHS-Labeling:

Globally Harmonized System of Classification and Labelling (GHS)  
Symbol(s):



Hazard Pictogram: GHS07  
Signal Word: Warning

Hazard Statement:	H302 H412	Harmful if swallowed. Harmful to aquatic life with long lasting effects.
Precautionary Statement:	P273 P301+P312  P330 P501	Avoid release to the environment. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Dispose of contents/container to waste disposal.

Other Hazards A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required/has not been carried out.

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

Ingredient(Chemical Name)	CAS#	EC#	Symbol(s)	R-phrase(s)	Hazard statement
3-Thiocyanatopropyltriethoxysilane, 95%min.	34708-08-2	252-161-3	Xn	R22 R52/53	H302 H412

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## \*\*\*\* 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 flush eyes with plenty of water for several minutes. Obtain medical attention if discomfort persists.

**Skin:** Flush skin with plenty of soap and water.

**Ingestion:** If conscious, allow the victim to rinse his mouth and seek medical advice.

**Inhalation:** Remove from exposure to fresh air immediately.

**Indication of any immediate medical attention and special treatment needed:**

Treat symptomatically and supportively.

## \*\*\*\* 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:** 112°C (234°F)

**Auto-ignition temperature:** N/A.

**Explosion Limits,** Lower: N/A.

Upper: N/A.

**HMIS Classification**

**NFPA Rating**

Health

1

Health

1

Flammability

0

Fire

0

Physical hazard

0

Reactivity

0

**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. Avoid contact with eyes and skin. Do not breathe vapor. Do not take internally.

**Storage:** Keep containers tightly closed and away from heat, sparks, and flame. Protect from moisture

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

**Control parameters**

gamma-Thiocyanatopropyltriethoxysilane

**DNEL/DMEL values**

**END USE**

**WORKER**

Routes of exposure

Dermal

Possible health damage

Acute – systemic effects

Value

No hazard identified

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Routes of exposure	Inhalation
Possible health damage	Acute – systemic effects
Value	Hazard unknown (no further information necessary)
Routes of exposure	Dermal
Possible health damage	Long term – systemic effects
Value	Insufficient data available (no further information necessary)
Routes of exposure	Inhalation
Possible health damage	Long term – systemic effects
Value	Insufficient data available (no further information necessary)
Routes of exposure	Dermal
Possible health damage	Acute - local effects
Value	No hazard identified
Routes of exposure	Inhalation
Possible health damage	Acute - local effects
Value	Hazard unknown (no further information necessary)
Routes of exposure	Dermal
Possible health damage	Long term - local effects
Value	No hazard identified
Routes of exposure	Inhalation
Possible health damage	Long term - local effects
Value	Hazard unknown (no further information necessary)
<b>END USE</b>	<b>GENERAL POPULACE</b>
Routes of exposure	Dermal
Possible health damage	Acute – systemic effects
Value	No hazard identified
Routes of exposure	Inhalation
Possible health damage	Acute – systemic effects
Value	Hazard unknown (no further information necessary)
Routes of exposure	Oral
Possible health damage	Acute – systemic effects
Value	Low hazard (no threshold derived)
Routes of exposure	Dermal
Possible health damage	Long term – systemic effects
Value	Insufficient data available (no further information necessary)
Routes of exposure	Inhalation
Possible health damage	Long term – systemic effects
Value	Insufficient data available (no further information necessary)
Routes of exposure	Oral
Possible health damage	Long term – systemic effects
Value	Insufficient data available (no further information necessary)
Routes of exposure	Dermal
Possible health damage	Acute - local effects
Value	No hazard identified
Routes of exposure	Inhalation
Possible health damage	Acute - local effects
Value	Hazard unknown (no further information necessary)
Routes of exposure	Dermal
Possible health damage	Long term - local effects
Value	No hazard identified
Routes of exposure	Inhalation
Possible health damage	Long term - local effects
Value	Hazard unknown (no further information necessary)
Routes of exposure	Eyes
Possible health damage	Local effects
Value	No hazard identified

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PNEC values	Value	Assessment factor
Fresh water:	0.018 mg/l	1000
Marine water:	0.0018 mg/l	10000
Water-intermittent releases	0.18 mg/l	100
Sediment-Fresh water	0.068 mg/kg (dry weight)	N/A
Sediment-marine water	0.007 mg/kg (dry weight)	N/A
Soil	0.003 mg/kg (dry weight)	N/A
STP	0.43 mg/l	10

**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: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

**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. It should be defined in the work place in the form of a risk analysis according to directive 89/686/EEC and amendments.

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 vapors or aerosols. Avoid contact with skin and eyes

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

Appearance: Amber transparent liquid.

Odor: Mild

pH: N/A.

Vapor Pressure: 0.12 kPa @ 25°C.

Vapor Density: >1

Evaporation Rate: <1

Viscosity: 2.5 cSt @ 20°C

BP/BP Range: 265°C

Freezing/Melting Point: < 0°C

Decomposition Temperature: N/A.

Solubility: Insoluble.

Specific Gravity (H<sub>2</sub>O=1): 1.031 g/cm<sup>3</sup> @ 25°C

Molecular Formula: C<sub>10</sub>H<sub>21</sub>NO<sub>3</sub>SSi

Molecular Weight: 263.42

### \*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Keep away from heat and flame.

**Materials to avoid:** Strong oxidizing agents, acids, Bases.

**Hazardous decomposition products:** Carbon oxides, silicon oxides under fire or very high heat condition.

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

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## \*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

Acute oral toxicity: LD50 Rat: 1423 mg/kg  
Acute inhalation toxicity: N/A  
Acute dermal toxicity: LD50 Rat: 4000 mg/kg  
Skin irritation: Rabbit, not irritating  
Eye irritation: Rabbit, not irritating  
Sensitization: Buehler Test guinea pig: No sensitizing effects.  
Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA

## \*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

There is no information available

## \*\*\*\* 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.  
Incorrect disposal or reuse of this container is illegal and can be dangerous.  
No waste key number as per the European Waste Typed List can be assigned to this product, since such classification is based on (as yet undetermined) use to which the product is put by the consumer. The waste key number must be determined as per the European Waste Types List (EU Waste Types List 2000/532/EC) in cooperation with the disposal firm, producing firm or authority

## \*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

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

## \*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

### European/International Regulations

European Labeling in Accordance with EC Directives.

Statutory basis/list: According to Directive 67/548/EEC or 1999/45/EC.

Hazard Symbols:	Xn	Harmful.
Risk Phrases:	R22	Harmful if swallowed.
	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases:	S24	Avoid contact with skin.
	S37	Wear suitable gloves.
	S57	Use appropriate container to avoid environmental contamination.
	S60	This material and its container must be disposed of as hazardous waste

### Other international regulations:

Listed on or in accordance with the following inventories

AICS - Not Listed/Not registered

EINECS - Listed/registered

ENCS - Not Listed/Not registered

IECSC - Listed/registered

KECL - Listed/registered

DSL - Not Listed/Not registered

NDSL - Listed/registered

PICCS - Listed/registered

TSCA - Listed/registered

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### \*\*\*\* SECTION 16 - ADDITIONAL 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