

# SAFETY DATA SHEET

Date Updated: 01.06.2013  
Version: EU 4.6  
Regulation REACH (EC 1907/2006) & CLP (EC 1272/2008)

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

## 3-Aminopropyltriethoxysilane [ Organosilane A302 ]

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

SDS Name: **3-Aminopropyltriethoxysilane (Organosilane A302)**

Chemical Name: 3-Aminopropyltriethoxysilane, 98%

Synonym(s): 3-Triethoxysilylpropylamine

IUPAC Name: 3-triethoxysilylpropan-1-amine

Company Identification: Dalian Onichem Co., Ltd.

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

Tel: 86-411-84794022, Fax: 86-411-84794077

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
Skin corrosion	Category 1B	H314
Skin sensitization	Category 1	H317

#### GHS-Labeling:

Globally Harmonized System of Classification and Labelling (GHS)

Symbol(s):



Hazard Pictogram: GHS05, GHS07

Signal Word: Danger

Hazard Statement:	H302 H314 H317	Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction.
Precautionary Statement:	P260 P262 P280 P303+P361+P353 P310 P305+P351+P338	Do not breathe dust/fume/ gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

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 statements
3-Aminopropyltriethoxysilane, 98% min	919-30-2	213-048-4	Xn, C	R22 R34 R43	H302 H314 H317

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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 at least 15 minutes with eye held open. Continue rinsing process with eye rinsing solution. Protect unaffected eye. Immediate further treatment in ophthalmic hospital. Continue rinsing eye until arrival at hospital.

**Skin:** Flush skin with plenty of soap and water for at least 15 minutes. Consult a physician.

**Ingestion:** Do NOT induce vomiting. If conscious, allow the victim to rinse his mouth and then to drink plenty of water in small sips, and seek medical advice immediately.

**Inhalation:** Remove from exposure to fresh air immediately. Keep patient half sitting with upper body raised if breathing difficulties occur. Consult a physician immediately.

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

Therapy as for chemical burn.

If substance has been swallowed:

Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear.

If necessary, suck away leftover substance. Allergic reactions can not be excluded. Treatment of allergic reaction if necessary

## \*\*\*\* 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 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:** 96 °C (205°F)

**Auto-ignition temperature:** 300°C (572°F)

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

Upper: N/A.

**HMIS Classification**

**NFPA Rating**

Health 3

Health 3

Flammability 1

Fire 1

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 regulations

## \*\*\*\* 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 breathe vapors or spray mist.

**Storage:** Store in a tightly closed container. Store in a cool and dry area.

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.

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## 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. 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: Colorless and transparent liquid.

Odor: Amine-like.

pH: 11.3 (500 g/l) @ 20°C

Vapor Pressure: 2 Pa @ 20°C

Vapor Density: N/A.

Evaporation Rate: N/A.

Viscosity: 2 mPa.s @ 20°C

BP/BP Range: 220 °C

Freezing/Melting Point: <-70 °C

Decomposition Temperature: > 217 °C

Solubility: reacts with water.

Specific Gravity/Density: 0.950 g/cm<sup>3</sup> @ 20°C

Molecular Formula: C<sub>9</sub>H<sub>23</sub>NO<sub>3</sub>Si

Molecular Weight: 221.37

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

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

**Conditions to Avoid:** Keep away from heat and sources of ignition.

**Materials to Avoid:** Strong oxidizing agents - moist air or water, acids.

**Hazardous Decomposition Products:** Ethanol in case of hydrolysis.

**Hazardous Polymerization:** Has not been reported

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

Acute oral toxicity: LD<sub>50</sub> Rat: 1,490 mg/kg

Acute inhalation toxicity: LC<sub>50</sub> Rat: >144 mg/l/6 h/vapor

Acute dermal toxicity: LD<sub>50</sub> Rabbit: 4,076 mg/kg

Skin irritation: Rabbit: Corrosive.

Eye irritation: Rabbit: Very markedly irritating.

Carcinogenicity: N/A

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

Biodegradability: Exposure time: 28 d 67% Not readily biodegradable.

Bioaccumulation: Not bioaccumulative.

Toxicity to fish: LC<sub>0</sub> Brachydanio rerio >934 mg/l/96 h

Toxicity to algae: EC<sub>50</sub> scenedesmus subspicatus: >1,000 mg/l/72 h

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## \*\*\*\* 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 \*\*\*\*

Shipping Name: CORROSIVE LIQUID, N.O.S.

Technical name: 3-Aminopropyltriethoxysilane

DOT	Class	UN/ID	PG		PI
	8	2735	II		
IATA/ICAO	Class	UN/ID	PG		PI
	8	2735	II		
IMO/IMDG	Class	UN	PG	EmS	PI
	8	2735	II	F-A,S-B	
ADR/RID	Class	UN	PG		PI
	8	2735	II		

## \*\*\*\*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.
	C	Corrosive.
Risk Phrases:	R22	Harmful if swallowed.
	R34	Causes burns.
	R43	May cause sensitization by skin contact.
Safety Phrases:	S1/2	Keep locked up and out of reach of children.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S45	In case of accident or if you feel unwell, seek medical advice(show the label where possible).

### Other 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

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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