

**MATERIAL SAFETY DATA SHEET**Date Updated: 30.12.2003  
Version: 2.1**ORGANOSILANE MMO****\*\*\*\* SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION \*\*\***

MSDS Name: OrganosilaneMMO

Chemical Name: Methyltrimethoxysilane, 99%

Formula: C4H12O3Si

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 1

Company Identification: Dalian Onichem Co., Ltd.

218-220, 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-COMPOSITION / INFORMATION ON INGREDIENTS \*\*\*\***

IDENTITY	CAS NO.	%	TLV	OSHA PEL
METHYLTRIMETHOXYSILANE	1185-55-3	>99		not established

(TLV for methanol: 200ppm - skin)

**\*\*\*\* SECTION 3 -PHYSICAL DATA\*\*\*\***

Boiling Point: 102-3°C

Melting Point: &lt;0°C

Specific Gravity: 0.955

Vapor Pressure @25°C: not determined

Vapor Density, air = 1: &gt; 1

Solubility in water: insoluble, reacts

% volatiles: 100

Evaporation rate

(Butyl Acetate = 1): &lt;1

Viscosity: 0.5 cSt.

Molecular Weight: 136.22

Appearance &amp; Color: Clear liquid, characteristic odor

**\*\*\*\* SECTION 4 -FIRE & EXPLOSION DATA\*\*\*\***

Flash Point, TCC: 8°C (46°F) Autoignition Temp.: 255°C (491°F)

Flammability Limits- LEL: 1.5% UEL: 10.4%

Extinguishing Media: Water spray or fog, foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: Vapors extremely dangerous to eyes. Avoid eye and skin contact.

Do not breathe fumes or inhale vapors.

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

**\*\*\*\* SECTION 5 -ENVIRONMENTAL INFORMATION \*\*\*\***

Spill response: With adequate eye protection, absorb material and transfer to a suitable container for hydrolysis and disposal.

Recommended Disposal: In a well ventilated area with adequate personal protection, hydrolyze material by mixing with cold water. Resulting waste is a solid containing methanol. Follow all chemical pollution control regulations for land fill.

**\*\*\*\* SECTION 6 -HEALTH HAZARD DATA \*\*\*\***

Eye Contact: Causes immediate or delayed severe eye irritation and possible blindness. Even mild exposures can cause conjunctivitis and corneal scarring.

Skin contact: May produce irritation or contact dermatitis. Material generates methanol on contact with water or moisture in skin, eyes and mucous membranes and has an irritating, dehydrating effect on overexposed tissue. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation may irritate the respiratory tract. Under experimental conditions, the kidney was found to be the target organ for similar methoxysilanes. Overexposure can cause lung damage - pulmonary toxin.

Note: The hydrolysis product of methyltrimethoxysilane is methanol.

Oral Toxicity-rat, LD50: 12,500mg/kg

**MATERIAL SAFETY DATA SHEET**

Date Updated: 30.12.2003

Version: 2.1

Inhalation Toxicity: not determined

**\*\*\*\* SECTION 7–SUGGESTED FIRST AID\*\*\*\***

**EYES:** In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

**SKIN:** Flush with water, then wash with soap and water.

**INHALATION:** Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

**INGESTION:** Never give fluids or induce vomiting if patient is unconscious or having convulsions. To conscious individual give one full cup of water to dilute ingested material. Get medical attention.

**NOTE TO PHYSICIAN:** This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

**\*\*\*\* SECTION 8–REACTIVITY DATA\*\*\*\***

Stability: Stable

Conditions to avoid: Material decomposes slowly in contact with moist air or with water liberating methanol. Avoid contact with oxidizing agents.

Hazardous decomposition products: Methanol, organic acid vapors and silicon dioxide.

**\*\*\*\* SECTION 9–SPECIAL PROTECTION INFORMATION\*\*\*\***

Ventilation: Local exhaust is recommended. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved organic vapor respirator.

Eye and Face Protection: Chemical worker goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

**\*\*\*\* SECTION 10–OTHER PRECAUTIONS \*\*\*\***

For research and industrial use only.

Storage and Handling: Store in sealed containers.

Containers require grounding during use.

**\*\*\*\* SECTION 11–TRANSPORTATION\*\*\*\***

DOT SHIPPING NAME: FLAMMABLE LIQUID, N.O.S. (METHYLTRIMETHOXYSILANE)

DOT HAZARD CLASS: 3

DOT LABEL: FLAMMABLE LIQUID

DOT ID No: UN1993 PG II

**\*\*\*\* SECTION 12 - 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.