

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

MSDS Name: Organosilane VME

Chemical Name: Vinyltris(2-methoxyethoxy)silane

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 \*\*\*\***

CAS# Chemical Name, %

1067-53-4 Vinyltris(2-methoxyethoxy)silane

**\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*****EMERGENCY OVERVIEW**

Moisture sensitive.

Target Organs: None.

Potential Health Effects

Eye: May cause immediate or delayed severe eye irritation

Skin: May produce irritation or contact dermatitis. Material generates ethanol 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.

Ingestion: N/A.

Inhalation: Inhalation may irritate the respiratory tract. Overexposure can cause lung damage – pulmonary toxin.

Chronic: N/A.

Note: The hydrolysis product of vinyltris(methoxyethoxy)silane is methoxyethanol.

Methoxyethanol is a reproductive toxin. 2-Methoxyethanol is rapidly absorbed by all routes and undergoes hepatic metabolism to methoxyacetic acid. Exposure to methoxyethanol and methoxyacetic acid have been positively linked to the induction of reproductive toxicity and subtle birth defects (teratogenicity).

**\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\***

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.

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.

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

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.

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

Special Fire Fighting Procedures: 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

Do NOT use water directly on fire. Use foam, dry chemical, or carbon dioxide.

Autoignition Temperature: N/A

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Flash Point: 92 deg C ( 198 deg F)

NFPA Rating: Not published.

Explosion Limits, Lower: N/A.

Upper: N/A.

**\*\*\*\* 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., dry sand or earth), then place into a chemical waste container.

**\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\***

Stored in sealed containers. Avoid heat and sunlight

**\*\*\*\* 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

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.

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

Appearance: clear or light yellowish liquid

Odor: ester.

pH: N/A.

Vapor Pressure: &lt;1 mm Hg @ 90 deg. C

Vapor Density: N/A.

Evaporation Rate: N/A.

Viscosity: N/A.

Boiling Point: 285 deg C @ 760 mm Hg

Freezing/Melting Point: &lt; 0 deg C

Decomposition Temperature: N/A

Solubility: reacts with water

Specific Gravity/Density: 1.040 g/cm<sup>3</sup>Molecular Formula: C<sub>11</sub>H<sub>24</sub>O<sub>6</sub>Si

Molecular Weight: 280.39

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

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: heat

Incompatibilities with Other Materials: Strong oxidizing agents, moist air or water.

Hazardous Decomposition Products: Methoxyethanol, organic acid vapors and silicon dioxide.

Hazardous Polymerization: when heated over 120 deg. C.

**\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\***Oral Toxicity: oral-rat, LD<sub>50</sub>: 2,960mg/kg.

Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

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

Ecotoxicity: N/A.

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

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

Not listed as a material banned from land disposal according to RCRA.

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

not listed by IMDG

**\*\*\*\* SECTION 15 - 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.