

# Material Safety Data Sheet

Emergency Phone:(248)-373-8100 24-Hour CHEMTREC (800)-424-9300 CHEMTREC, D.C. Area (800)-483-7616

## I. Chemical Product And Company Data

**PRODUCT:** ISO-FLEX 618 – 100 CRS  
**CHEMICALFAMILY:** Silane  
**REVISION DATE:** MAR 2007  
**MANUFACTURER:** LymTal International, Inc.  
4150 S. Lapeer Rd. Orion, MI 48359

Health	1
Flammability	2
Reactivity	1
Personal Protection	H

## II. Composition / Information On Ingredients

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard. All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

HAZARDOUS INGREDIENTS	CAS NO	EXPOSURE LIMITS			CONTENT
		TLV	STEL	PEL	
Alkylalkoxysilane	34396-03-7	N/A	N/A	N/A	< 90%
Tetraethylorthosilicate	000078-10-4	N/A	N/A	N/A	< 2%
Silicic Acid, ethyl ester	011099-06-2	N/A	N/A	N/A	< 9%

### California Proposition 65 ingredients

None

### Section 313 Supplier Notification

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 (40CFR372)

None

## III. Hazards Identification

HMIS Hazard Rating No. 1

PRIMARY ROUTE OF ENTRY: Eye and skin contact, breathing and ingestion.

Symptoms of Exposure

Skin Contact: Prolonged contact may cause moderate skin irritation.  
Eyes: Product may cause severe irritation, redness, tearing and blurred vision.  
Inhalation: May cause lung damage at prolonged or repeated inhalation or at high concentrations.  
Ingestion: Not expected to be a relevant route of exposure although it may cause gastrointestinal irritation, nausea, vomiting, diarrhea, headache and drowsiness.

## IV. First Aid Measures

<u>Inhalation</u>	Remove victim from exposure. If difficulty with breathing, administer oxygen and seek medical assistance
<u>Eyes</u>	Flush eyes with cold water for a minimum of 15 minutes, lifting lower and upper eye lids throughout. Seek immediate medical attention.
<u>Skin</u>	Immediately remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash contaminated clothing before reuse.
<u>Ingestion</u>	Do not induce vomiting, get immediate medical attention, if vomiting occurs spontaneously keep head below hips to prevent aspiration of liquids into lungs. Do not give anything by mouth to an unconscious person

## V. Fire Fighting Methods

HMIS Hazard Rating No. 2

Flash Point: > 52 °C ( 125.6 °F )

Method: T C.C.

General Hazard: Decomposition and combustion products may be toxic.

Auto-ignition Temp.: 310 °C ( silane )

Limits of Flammability

LEL: Not Available

UEL: Not Available

Extinguishing Media

For small fires, use water spray, foam, CO<sub>2</sub>, or dry chemical. For large fires, use water spray, fog, or alcohol foam.

Special Fire & Unusual Hazards

Move containers from area if it can be done without risk. Cool fire-exposed containers with water from the side. As in any fire, wear NIOSH/MSHA approved, pressure demand self contained breathing apparatus and full protective gear.

## VI. Accidental Release Measures

Action To Take For Spills/ Leaks: Avoid contact with skin or eyes. Ventilate the area, and eliminate all sources of ignition. Wear appropriate protective gear, contain leak or spill, salvage, and clean up residue with absorbent material.

Waste Disposal Method: Handle disposal of waste material in a manner that complies with local, state, province and federal regulation. Landfill if solidified, or incineration at agency approved waste-disposal facilities.

## VII. Handling And Storage

Average Shelf Life:

Refer to Product Data Sheet

Special Instructions

Store in a cool dry place.

## VIII. Exposure Controls / Personal Protection

Ventilation: Ventilation is recommended. Air movement must be designed to insure turnover at all locations in work area to avoid build up of heavy vapors.

Personal Protection Equipment: Do NOT wear contact lenses when working with this material. Use chemical goggles/safety glasses with side shields and impervious gloves. Wear clothing with long sleeves and pants. In operations where mists can be generated or the exposure limits for crystalline silica exceeded, wear a NIOSH/MSHA approved dust/fume respirator selected by a technically qualified person for the specific work conditions. Wear respirator protection whenever airborne concentrations exceed TLV ceilings or TWA, use NIOSH approved respirators for listed hazard.

Confined spaces, room, or tanks are areas where concern for TLV's is especially important. Reference OSHA regulation CFR 29 1910.134 for recommended respiratory protection.

## IX. Physical And Chemical Properties

Boiling Point (°C):	90 ( Silane )	Water/Oil Distribution Coefficient:	N/A
Volatile Organic Content:	400 g/l	Solubility in Water:	Negligible
Freezing Point (°C):	N/A	Specific Gravity @20° C	0.91
Vapor Pressure @ 20° C	N/A	pH:	N/A
Vapor Density	N/A	Evaporation Rate:	N/A
Odor Threshold:	N/A	Odor:	Slight
Appearance:	Clear liquid		
N/A = Not Available	N/D=NOT Determined	Ca. = Approximate	

## X. Stability And Reactivity

HMIS Hazard Rating No. 1

Stability

Stable

Incompatibility:

Strong acids and bases, oxidizing and reducing agents and peroxides.

Hazardous Decomposition Products

Oxides of Carbon; Decomposition and Combustion products may be toxic.

Conditions To Avoid

Avoid source of ignition and contamination.

## XI. Toxicity Information

HMIS Hazard Rating No. 1

PRIMARY ROUTE OF ENTRY: Inhalation, dermal, skin and eyes.

Effects Of Overexposure

Inhalation:

May cause lung damage at prolonged or repeated inhalation or at higher concentrations.

Eyes:

Contact can cause severe irritation, redness, tearing and blurred vision.

Skin Contact:

May cause moderate skin irritation.

Ingestion:

May cause permanent damage to the mouth throat and stomach.

Chronic:

This product does not contain chemicals considered to be carcinogenic by NTP, IRAC, ACGIH, OSHA.

## XII. Ecological Information

Marine Pollutant: NL

(NL = Not Listed; P = Moderate; PP = Severe; ND = Not Determined)

## XIII. Disposal Considerations

Handle disposal of waste material in manner that complies with all applicable local, state, provincial and federal regulations.

## XIV. Transport Information

### DOT SHIPPING INFORMATION

DOT Proper Shipping Name NOT REGULATED IN CONTAINERS LESS THAN 119 GALLONS

### IATA Bill of Lading - Air

Proper Shipping Name	Flammable Liquid N.O.S
Technical Name	Trimethoxy(2,4,4-trimethylpentyl)silane
UN Number	1993 PG III

## XV. Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200)	See section II
CERCLA/ Super fund (40 CFR 117,302)	N/A
SARA Extremely Hazardous Substances (40 CFR 355)	N/A
SARA Hazard Categories (40 CFR 370)	N/A
SARA Toxic Chemicals (40 CFR 372)	None
Inventory Status	The chemicals in this product are listed on the US TSCA Chemical Substance Inventory and the Canadian Domestic Substances List.

## XVI. Other Information

THE INFORMATION HEREIN HAS BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, LymTal INTERNATIONAL INC. CANNOT GIVE ANY GUARANTEES REGARDING INFORMATION FROM OTHER SOURCES, AND EXPRESSLY DOES NOT MAKE ANY WARRANTIES, NOR ASSUMES ANY LIABILITY, FOR ITS USE.