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 881R SEALANT, PART A**
CHEMICALFAMILY:	Polyurethane prepolymer (TDI base)
REVISION DATE:	APRIL 2012
DOCUMENT ID :	881R- PT. A, VERSION 1.0
MANUFACTURER:	LymTal International, Inc. 4150 S. Lapeer Rd. Orion, MI 48359

Health	**2**
Flammability	**1**
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 TLV	STEL	PEL	CONTENT
Petroleum Hydrocarbons	64742-95-6	100ppm	N/A	100ppm	= < 15 %
Toluene Diisocyanate	26471-62-5	0.005ppm	0.02ppm	0.005ppm	< 1.0%
Proprietary Ingredients (POLYURETHANE PREPOLYMER)	Proprietary				= > 85 %

N/E = Not Established

California Proposition 65 ingredients

Toluene Diisocyanate	26471-62-5	< 1.0%

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)

1,2,4-Trimethylbenzene	95-63-6	25ppm	N/A	25ppm	2.37%
Ethyl Benzene	100-41-4	100ppm	125ppm	100ppm	0.037%
Xylene	1330-20-7	100ppm	150ppm	100ppm	2.37%
Cumene	98-82-8	50ppm	N/A	50ppm	0.11%
Toluene Diisocyanate	26471-62-5	0.005ppm	0.02ppm	0.005ppm	<1.0%

III. Hazards Identification

HMIS Hazard Rating No. 2
PRIMARY ROUTE OF ENTRY: Eye and skin contact, breathing and ingestion.
Symptoms of Exposure

Skin Contact:	Contact can cause moderate skin irritation. In some individuals exposure may result in allergic type symptoms causing rash, itching and hives.
Eyes:	Product may cause severe irritation, redness and tearing to the eyes.
Inhalation	Vapors can be irritating to nose and mucous membranes. High exposures may result in tightness or burning in the chest, coughing, headaches, and fatigue. Respiratory sensitivity may result in asthma like symptoms and on subsequent exposure even below the TLV.
Ingestion:	Not expected to be a relevant route of exposure although it may cause permanent damage to the mouth throat and stomach, gastrointestinal irritation, nausea vomiting diarrhea and headache.

IV. First Aid Measures

Inhalation	Remove victim from exposure. If difficulty with breathing, administer oxygen and seek medical assistance
Eyes	Flush eyes with cold water for a minimum of 15 minutes, lifting lower and upper eye lids throughout. Seek immediate medical attention.
Skin	Immediately remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash contaminated clothing before reuse.
Ingestion	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. 1
Flash Point: > 93 °C (200 °F) Method: Tag C.C.
General Hazard: Decomposition and combustion products may be toxic.
Auto-Ignition Temp.: Not Available

Limits of Flammability	LEL: Not Available	UEL: Not Available
Extinguishing Media	Use foam, Carbon dioxide, or dry chemical.	
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 area, and eliminate all sources of ignition. Wear appropriate protective gear, contain leak or spill, salvage, clean up residue with absorbent material.
Waste Disposal Method: Handle disposal of waste material in 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 (^{o}C):	N/D	Water/Oil Distribution Coefficient:	N/A
VOC Content g/l:	**Part A = ~ 158 g / L** **A+B Mixed ~ 35 g / L**	Specific Gravity @20° C	**Pt. A only: 1.05** **A+B Mixed: 1.25**
Freezing Point (^{o}C):	N/A	Solubility in Water:	Negligible
Vapor Pressure @ 20^{o} C	<0.01	pH:	N/A
Vapor Density	>air	Evaporation Rate:	N/A
Odor Threshold:	N/A	Odor:	**Slightly Aromatic**
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, oxidizing agents reducing agents, bases, peroxides amines and water.
Hazardous Decomposition Products	Oxides of Carbon; nitrogen; MDI, and hydrogen cyanide. Decomposition and Combustion products may be toxic.
Conditions To Avoid	Water as well as chemicals mentioned in incompatibility.

XI. Toxicity Information

HMIS Hazard Rating No. 2

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

Effects Of Overexposure

Inhalation:	Vapors may be irritating to the upper respiratory tract.
Eyes:	Contact can cause severe irritation.
Skin Contact:	Irritating to the skin. In some individuals it may cause sensitization.
Ingestion:	May cause permanent damage to the mouth throat and stomach.
Chronic:	This product does contain chemicals considered to be carcinogenic by NTP, IRAC, ACGIH, and 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 a manner that complies with all applicable local, state, provincial and federal regulations.

XIV. Transport Information

DOT SHIPPING INFORMATON

DOT Proper Shipping Name	**NOT REGULATED**
DOT Hazard Class	
DOT I.D Number	Label(s)

XV. Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200)	Hazardous
CERCLA/ Super fund (40 CFR 117,302)	N/A
SARA Extremely Hazardous Substances (40 CFR 355)	N/A
SARA Hazard Categories (40 CFR 370)	Health : Immediate Physical: Fire
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 COMPLIED 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.

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I. Chemical Product And Company Data

PRODUCT:	**ISO-FLEX 881R SEALANT, PART B**
CHEMICALFAMILY:	Polyols / Fillers blend
REVISION DATE:	APRIL 2012
DOCUMENT ID :	881R- PT. B, VERSION 1.0
MANUFACTURER:	LymTal International, Inc. 4150 S. Lapeer Rd. Orion, MI 48359

Health	**1**
Flammability	**1**
Reactivity	**0**
Personal Protection	**H**

II. Composition / Information On Ingredients

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		EXPOSURE LIMITS			
HAZARDOUS INGREDIENTS	CAS NO	TLV	STEL	PEL	CONTENT
Titanium Dioxide	013463-67-7	10mg/m3	N/E	10 mg/m3	0 – 7%
Polyether Polyol	52624-57-4	N/E	N/E	N/E	40 – 50 %
Proprietary Ingredients	Proprietary				Balance

N/E = Not Established

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:	Contact can cause moderate skin irritation. In some individuals exposure may result in allergic type symptoms causing rash, itching and hives.
Eyes:	Product may cause severe irritation, redness and tearing to the eyes.
Inhalation	Vapors can be irritating to nose and mucous membranes. High exposures may result in tightness or burning in the chest, coughing, headaches, and fatigue. Respiratory sensitivity may result in asthma like symptoms and on subsequent exposure even below the TLV.
Ingestion:	Not expected to be a relevant route of exposure although it may cause permanent damage to the mouth throat and stomach, gastrointestinal irritation, nausea vomiting diarrhea and headache.

IV. First Aid Measures

Inhalation	Remove victim from exposure. If difficulty with breathing, administer oxygen and seek medical assistance
Eyes	Flush eyes with cold water for a minimum of 15 minutes, lifting lower and upper eye lids throughout. Seek immediate medical attention.
Skin	Immediately remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash contaminated clothing before reuse.
Ingestion	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. 1
Flash Point: > 127 °C (>260 °F) Method: Tag C.C.
General Hazard: Decomposition and combustion products may be toxic.
Auto-Ignition Temp.: Not Available

Limits of Flammability	LEL: Not Available	UEL: Not Available
Extinguishing Media	Use foam, Carbon dioxide, or dry chemical.	
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.	

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Average Shelf Life:	Refer to Product Data Sheet
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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):	N/D	Water/Oil Distribution Coefficient:	N/A
VOC Content g/l:	**Part B = ~ 13 g / L** **A+B Mixed = ~ 35 g / L**	Specific Gravity @20° C	**Pt. B only: 1.28** **A+B Mixed: 1.25**
Freezing Point (°C):	N/A	Solubility in Water:	Negligible
Vapor Pressure @ 20° C	<0.01	pH:	N/A
Vapor Density	>air	Evaporation Rate:	N/A
Odor Threshold:	N/A	Odor:	**Slight**
Appearance:	**EITHER, WHITE, BEIGE, OR GRAY PASTE**		
N/A = Not Available	N/D=NOT Determined	Ca. = Approximate	

X. Stability And Reactivity

HMIS Hazard Rating No. 0

Stability	Stable
Incompatibility:	Strong acids, oxidizing agents reducing agents, bases, peroxides amines and water.
Hazardous Decomposition Products	Oxides of Carbon; nitrogen; TDI, and some hydrogen cyanide. Decomposition and Combustion products may be toxic.
Conditions To Avoid	Water as well as chemicals mentioned in incompatibility.

XI. Toxicity Information

HMIS Hazard Rating No. 1

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

Effects Of Overexposure

Inhalation:	Vapors may be irritating to the upper respiratory tract.
Eyes:	Contact can cause severe irritation.
Skin Contact:	Irritating to the skin. In some individuals it may cause sensitization.
Ingestion:	May cause permanent damage to the mouth throat and stomach.
Chronic:	This product does contain chemicals considered to be carcinogenic by NTP, IRAC, ACGIH, and OSHA.

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DOT Hazard Class	
DOT I.D Number	Label(s)

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CERCLA/ Super fund (40 CFR 117,302)	N/A
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