

# 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 640, PART A  
**CHEMICALFAMILY:** Polyisocyanate Prepolymer.  
**REVISION DATE:** MARCH, 2010  
**DOCUMENT ID:** 640-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			CONTENT
		TLV	STEL	PEL	
Homopolymer of HDI	28182-81-2	0.5mg/m3	1mg/m3	N/A	60-100%
Hexamethylene diisocyanate	822-06-0	0.005ppm	N/A	0.005ppm	< =0.25%
Hydrophillic Aliphatic polyisocyanate based on HMDI	Trade Secret	150 ppm	200 ppm	150 ppm	>=1%

### 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. 2

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

Symptoms of Exposure

Skin Contact: Causes skin irritation and in some cases sensitization with prolonged exposure.  
Eyes: Vapors are irritating to the eyes and may cause tearing and clouding of the eye.  
Inhalation Causes irritation of the mucous membranes, sore throat, cough and shortness of breath.

Ingestion: Not expected to be a relevant route of exposure although it may cause permanent damage to the mouth throat and stomach.

#### 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: 185 °C ( 365 °F )

Method: Setaflash

General Hazard: Decomposition and combustion products may be toxic.

Auto-Ignition Temp.: Not Available

Limits of Flammability

LEL: Not Established

UEL: Not Established

Extinguishing Media

Dry chemical, carbon dioxide, foam, water spray.

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. Decontaminate spill area with a decontamination solution : 3% concentrated Ammonia, 2% detergent and 95% water, allow to react for at least 10 minutes before cleaning.

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 (°C):	N/D	Water/Oil Distribution Coefficient:	N/A
VOC Content g/l	< 10 g / L ( VOC )	Solubility in Water:	Negligible
Freezing Point (°C):	N/A	Specific Gravity @20° C	1.15
Vapor Pressure @ 20° C	5.2 x 10-9	pH:	N/A
Vapor Density	>air	Evaporation Rate:	N/A
Odor Threshold:	N/A	Odor:	Slight
Appearance:	Amber liquid		
N/A = Not Available	N/D=NOT Determined	Ca. = Approximate	

## X. Stability And Reactivity

HMIS Hazard Rating No. 1

Stability

Stable

Incompatibility:

Water, amines, strong bases, alcohols, and metal compounds.

Hazardous Decomposition Products

Oxides of Carbon; and nitrogen, and Hydrogen cyanide; Decomposition and Combustion products may be toxic.

Conditions To Avoid

See incompatibility.

## XI. Toxicity Information

HMIS Hazard Rating No. 2

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

Effects Of Overexposure

Inhalation:

Causes irritation of the mucous membranes, sore throat, cough and shortness of breath.

Eyes:

Vapors are irritating to the eyes and may cause tearing and clouding of the eye.

Skin Contact:

Causes skin irritation and in some cases sensitization with prolonged exposure.

Ingestion:

Not expected to be a relevant route of exposure although it 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 which complies with all applicable local, state, provincial and federal regulations.

## XIV. Transport Information

### DOT SHIPPING INFORMATION

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)

None

SARA Extremely Hazardous Substances  
(40 CFR 355)

None

SARA Hazard Categories (40 CFR 370)

Acute health hazard, Chronic health hazard,  
Reactivity hazard

SARA Toxic Chemicals (40 CFR 372)  
Inventory Status

None

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.

# 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 640, PART B  
**CHEMICALFAMILY:** Modified Aliphatic Amine.  
**REVISION DATE:** MARCH, 2010  
**DOCUMENT ID:** 640-PT.B , VERSION 1.0  
**MANUFACTURER:** LymTal International, Inc.  
4150 S. Lapeer Rd. Orion, MI 48359

Health	0
Flammability	1
Reactivity	0
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
		TWA	STEL	PEL	
Propylene Glycol n-butyl ether	5131-66-8	N/A	N/A	N/A	1-5%
Triethanolamine	102-71-6	5mg/m3	N/A	N/A	<10%
Water	7732-18-5	N/A	N/A	N/A	>=1%
Polyacrylate Resin	710313-77-2	N/A	N/A	N/A	>=1%

### 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. 0

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

Symptoms of Exposure

**Skin Contact:** Prolonged or repeated exposure may cause skin irritation and redness. Skin sensitization or allergic reaction may occur in some individuals.  
**Eyes:** Product may cause severe irritation to the eyes.  
**Inhalation** Inhalation is unlikely due to low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation.

Ingestion: Not expected to be a relevant route of exposure although it may cause nausea, vomiting, diarrhea, headache, and drowsiness. Can result in serious damage to the mouth and stomach.

#### 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: N/D

Method: Pensky Martin 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

Carbon Dioxide, foam, dry chemical, and water fog.

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, 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 keep from freezing.

#### 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 are exceeded, then 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):	100	Water/Oil Distribution Coefficient:	N/A
Percent Volatile:	< 10 g / L ( VOC )	Solubility in Water:	Yes
Freezing Point (°C):	0	Specific Gravity @20° C	1.09
Vapor Pressure @ 20° C	N/D	pH:	N/A
Vapor Density	>air	Evaporation Rate:	Less than ether
Odor Threshold:	N/A	Odor:	Faint
Appearance:	Colorless white liquid		
N/A = Not Available	N/D=NOT Determined	Ca. = Approximate	

## X. Stability And Reactivity

HMIS Hazard Rating No. 0

Stability

Stable

Incompatibility:

Oxidizing agents.

Hazardous Decomposition Products

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

Conditions To Avoid

Protect from Freezing

## XI. Toxicity Information

HMIS Hazard Rating No. 0

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

Effects Of Overexposure

Inhalation:

Causes narcotic effects and headaches with overexposure.

Eyes:

Contact can cause severe irritation and burns.

Skin Contact:

In some individuals it may cause sensitization and mild burns.

Ingestion:

May cause permanent damage to the mouth throat and stomach.

## 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 which complies with all applicable local, state, provincial and federal regulations.

## XIV. Transport Information

DOT SHIPPING INFORMATION

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)	None
SARA Extremely Hazardous Substances (40 CFR 355)	None
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 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.