

# 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 PRIMER 10, PART A  
**CHEMICALFAMILY:** Isocyanate Prepolymer  
**REVISION DATE:** MARCH 2010  
**DOCUMENT ID :** P10-PT.A , VERSION 1.0  
**MANUFACTURER:** LymTal International, Inc.  
4150 S. Lapeer Rd. Orion, MI 48359

Health	2
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	
Propylene Glycol Monomethyl Ether Acetate	108-65-6	N/A	150ppm	N/A	10 – 20%
Xylene	1330-20-7	100ppm	150ppm	100ppm	10 – 20%
Ethyl Benzene	100-41-4	100ppm	125ppm	100ppm	<=3.3%
Urethane Prepolymer	Proprietary	N/A	N/A	N/A	60 - 100%
2,4-Toluene Diisocyanate	584-84-9	0.005 ppm	0.02 ppm	0.005 ppm	<=0.4%
2,6-Toluene Diisocyanate	91-08-7	0.005 ppm	0.02 ppm	0.005 ppm	<=0.1%

### California Proposition 65 ingredients

Ethyl Benzene	100-41-4	<=3.3%
2,4-Toluene Diisocyanate	584-84-9	<=0.4%
2,6-Toluene Diisocyanate	91-08-7	<=0.1%

### 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)

Xylene	1330-20-7	10 – 20%
Ethyl Benzene	100-41-4	<=3.3%
2,4-Toluene Diisocyanate	584-84-9	<=0.4%
2,6-Toluene Diisocyanate	91-08-7	<=0.1%

## 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 may cause moderate skin irritation. In some individuals exposure may result in allergic type symptoms causing rash, itching, and hives.
- Eyes:** Contact can cause burning and tearing.
- Inhalation** Vapors can be irritating to nose and mucous membranes. High exposures may result in narcotic effect, headaches, tightness or burning in chest and coughing. 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 gastrointestinal irritation, nausea, vomiting and abdominal pain.
- Chronic:** TDI was listed as a potential animal carcinogenic by NTP and IARC. National Toxicology Program study reported increased tumors in rats and mice via TDI exposure through a tube in the stomach (oral gavage technique); lifetime inhalation studies on animals were negative regarding carcinogenicity.

Materials are not known mutagenic, teratogenic, or reproductive health hazards.

## 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. 2

**Flash Point:** 40 °C (104 °F)

**General Hazard:** Decomposition and combustion products may be toxic.

**Auto-Ignition Temp.:** Not Available

**Limits of Flammability**

LEL: 1.0% solvent

UEL: 13.10% solvent

**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 area, and eliminate all sources of ignition. Wear appropriate protective gear, contain leak or spill, salvage, clean up residue with absorbent material. Wash down area with dilute ammonium hydroxide or detergent solution, allow 30 minutes to react. For large spills, dike area and pump into closed containers. Prevent this material from entering waterways.

**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:  
Special Instructions

Refer to Product Data Sheet

Keep containers closed and stored in a well ventilated area at 60 —80 deg F. Outage of container should be filled with nitrogen. Contamination by moisture or basic compounds can cause dangerous pressure build up in closed containers.

## 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 may be 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):	145	Water/Oil Distribution Coefficient:	N/A
VOC Content g/l:	441 g/L ( A + B = 356 g/L)	Solubility in Water:	Reacts with water
Freezing Point (°C):	-14	Specific Gravity @20° C	1.15
Vapor Pressure @ 20° C	11mbar	pH:	N/A
Vapor Density	> air	Evaporation Rate:	N/a
Odor Threshold:	N/A	Odor:	Aromatic
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:

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

Hazardous Decomposition Products

At elevated temperatures, isocyanate vapors may be formed. Under severe thermal degradation, carbon monoxide and low molecular weight organic compounds may be formed as well as hydrogen cyanide and Isocyanic Acid.

Conditions To Avoid

See incompatibility.

## XI. Toxicity Information

HMIS Hazard Rating No. 2

PRIMARY ROUTE OF ENTRY: Inhalation, dermal

Effects Of Overexposure

**Inhalation:** Vapors can be irritating to nose and mucous membranes. High exposures may result in narcotic effect, headaches, tightness or burning in chest and coughing. Respiratory sensitivity may result in asthma-like symptoms and on subsequent exposure even below the TLV.

**Eyes:** Contact can cause burning and tearing.

**Skin Contact:** Contact may cause moderate skin irritation. In some individuals exposure may result in allergic type symptoms causing rash, itching, and hives.

**Ingestion:** Not expected to be a relevant route of exposure although it may cause gastrointestinal irritation, nausea, vomiting and abdominal pain.

**Chronic:** TDI was listed as a potential animal carcinogenic by NTP and IARC. National Toxicology Program study reported increased tumors in rats and mice via TDI exposure through a tube in the stomach (oral gavage technique); lifetime inhalation studies on animals were negative regarding carcinogenicity.  
Materials are not known mutagenic, teratogenic, or reproductive health hazards.

## 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 INFORMATION

DOT Proper Shipping Name	Resin solution (contains Xylene, 2,4-Toluene Diisocyanate)		
DOT Hazard Class	3	PG III	
DOT I.D Number	UN 1866	Label(s)	Flammable

## XV. Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200)	Hazardous	
CERCLA/ Super fund (40 CFR 117,302)	Xylene	RQ: 100lbs
	Ethyl Benzene	RQ: 1000lbs
	2,4-toluene diisocyanate	RQ: 100lbs
	2,6-toluene diisocyanate	RQ: 100lbs
SARA Extremely Hazardous Substances (40 CFR 355)	2,4 Toluene diisocyanate 2,6 Toluene diisocyanate	
SARA Hazard Categories (40 CFR 370)	Acute health hazard, Chronic Health hazard, Fire Hazard.	
SARA Toxic Chemicals (40 CFR 372)	See section II supplier notification	
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.

# 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 PRIMER 10, PART B  
**CHEMICALFAMILY:** Polyol and petroleum hydrocarbons  
**REVISION DATE:** MARCH, 2010  
**DOCUMENT ID :** P10-PT.B , VERSION 1.0  
**MANUFACTURER:** LymTal International, Inc.  
4150 S. Lapeer Rd. Orion, MI 48359

Health	1
Flammability	2
Reactivity	1
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## 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	
Petroleum Hydrocarbons	64742-95-6	100ppm	N/A	N/A	25.2%
Nonhazardous Ingredients					Balance

### 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)

1,2,4-trimethylbenzene	95-63-6	25 ppm	N/A	25 ppm	12.8%
Xylene	1330-20-7	100 ppm	150 ppm	100 ppm	1.2%
Cumene	98-82-8	50 ppm	N/A	50 ppm	0.6%
Ethyl Benzene	100-41-4	100 ppm	125 ppm	100 ppm	0.2%

## 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 may cause moderate skin irritation. In some individuals exposure may result in allergic type symptoms causing rash, itching and hives.

Eyes: Contact can cause severe irritation, redness, tearing and blurred vision.  
Inhalation Vapors can be irritating to nose and mucous membranes. Exposures may result in tightness or burning in chest, coughing, headache and fatigue. Respiratory sensitivity may result in asthma like symptoms and on subsequent exposure even below the TLV.  
Ingestion: Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly leading to death.

#### 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. 2

**Flash Point:** 43 °C (110 °F)

**Method:** Tag C.C.

**General Hazard:** Decomposition and combustion products may be toxic.

**Auto-Ignition Temp.:** 471 °C (AH)

**Limits of Flammability**

LEL: 1.9% (AH)

UEL: 12.6% (AH)

**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 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. Keep away from heat, open flames or sources of sparks. Keep container closed at all times when not in use.

#### 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 may be 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	N/A
VOC Content	325 g/L ( A + B = 356 g/L)	Coefficient:	
Percent Volatile:	Ca ~ 40%	Solubility in Water:	Negligible
Freezing Point (°C):	N/A	Specific Gravity @20° C	0.92
Vapor Pressure @ 20° C	9.5	pH:	N/A
Vapor Density	>air	Evaporation Rate:	N/A
Odor Threshold:	N/A	Odor:	Aromatic
Appearance:	Amber liquid		
N/A = Not Available	N/D=NOT Determined	Ca. = Approximate	

## X. Stability And Reactivity

HMIS Hazard Rating No. 1

### Stability

Stable, avoid contact with moisture.

### Incompatibility:

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

### Hazardous Decomposition Products

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

### Conditions To Avoid

Strong acids, bases, amines and peroxides in bulk.

## XI. Toxicity Information

HMIS Hazard Rating No. 1

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

Effects Of Overexposure

### Inhalation:

Vapors can be irritating to nose and mucous membranes.

### Eyes:

Contact can cause severe irritation.

### Skin Contact:

In some individuals it may cause sensitization.

### Ingestion:

Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly leading to death.

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 a manner that complies with all applicable local, state, provincial and federal regulations.

### **XIV. Transport Information**

#### **DOT SHIPPING INFORMATION**

DOT Proper Shipping Name This product is not regulated by DOT in containers of 119 gallon capacity or less.

#### **INTERNATIONAL**

Proper Shipping Name	<b>Flammable liquid, N.O.S (petroleum distillate)</b>		
Hazard Class	<b>3 PG III</b>		
I.D Number	<b>UN 1993</b>	Label(s)	Flammable

### **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: Delayed
SARA Toxic Chemicals (40 CFR 372) Inventory Status	See section 313 advisory in section II 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.