

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: LYMTAL 320 PART A
CHEMICALFAMILY: Polyurethane Prepolymer
REVISION DATE: AUG 2009
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	
Petroleum Asphalt	8052-42-4	5mg/m3	N/Av	5mg/m3	<30.0%
Petroleum Hydrocarbons	64742-95-6	100ppm	N/Av	N/Av	13.36%
Proprietary Ingredients					Balance

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)

Toluene Diisocyanate	26471-62-5	0.005ppm	0.02mg/m3	0.005ppm	<1.0%
1,2,4-trimethylbenzene	95-63-6	25ppm	N/Av	25ppm	6.78%
Xylene	1330-20-7	100ppm	150ppm	100ppm	0.636%
Cumene	98-82-8	50ppm	N/Av	50ppm	0.318%
Ethyl Benzene	100-41-4	100ppm	125ppm	100ppm	0.106%
Hydrogen Sulfide	26471-62-5	0.005ppm	0.02ppm	0.005ppm	0.03%

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 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:	Not expected to be a relevant route of exposure although it can cause gastrointestinal irritation, nausea, vomiting diarrhea and headache.
Chronic	One scientific study of workers reported that exposure to isocyanate type chemicals resulted in larger declines in lung function compared to other workers. Materials are not known mutagenic, teratogenic, or reproductive health hazards.

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: > 100 °F

Method: Pensky Marten 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 area, eliminate all sources of ignition. Wear appropriate protective gear, contain leak or spill, salvage, clean up residue with absorbent material. This product is heavier than and insoluble in water. Wash down area using a soap solution and allow 10 minutes to react.

Waste Disposal Method: Handle disposal of waste material in manner which 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
Volatile Organic Content:	226 g/l	Solubility in Water:	Negligible
Freezing Point (°C):	N/A	Specific Gravity @20° C	1.07
Vapor Pressure @ 20° C	N/A	pH:	N/A
Vapor Density	>air	Evaporation Rate:	N/A
Odor Threshold:	N/A	Odor:	Aromatic
Appearance:	Black 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. 2

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:

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

INTERNATIONAL

DOT Proper Shipping Name Flammable liquid, n.o.s (petroleum distillate)

DOT Hazard Class 3, PG III

DOT I.D Number UN1993 Label(s) Flammable

XV. Regulatory Information

OSHA Hazard Communication Standard
(29 CFR 1910.1200)

Hazardous

CERCLA/ Super fund (40 CFR 117,302)

CASRN 26471-62-5 RQ: 100 lbs

SARA Extremely Hazardous Substances
(40 CFR 355)

N/A

SARA Hazard Categories (40 CFR 370)
Section 311/ 312

Health : Immediate

Physical: Delayed, reactive

SARA Toxic Chemicals (40 CFR 372)

See section 313 advisory in section II

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. CAN NOT 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: Lymtal 320 PART B
CHEMICAL FAMILY: Amine .
REVISION DATE: 08/21/09
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

HAZARDOUS INGREDIENTS	CASNO	EXPOSURE LIMITS*			CONTENT
		TLV	STEL	PEL	
N,N'-Dialkylamino-diphenylmethane	5285-60-9	None	None	None	<50%
Proprietary Ingredients					Balance

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 (40 CFR 372)

None

California Proposition 65 Ingredients

MDA 101-77-9 < 0.05 wt%

*) Refer to Section (XI) for available LD/LC(50) Health Hazard Data.

III. Hazards Identification

HMIS Hazard Rating No. 1

PRIMARY ROUTE OF ENTRY: Dermal, eyes, and product vapor inhalation.

Effects Of Overexposure

Inhalation: Inhalation of product vapors or mist may cause irritation of the respiratory tract.
Eyes: May cause mild irritation.
Skin Contact: May cause slight irritation.
Skin Absorption: Absorption through skin is possible and may cause systemic effects.
Ingestion: Moderately toxic by ingestion. Can cause gastrointestinal irritation, nausea, vomiting, diarrhea, headache and drowsiness.

Chronic: Product does not contain carcinogenic materials as defined by OSHA Hazardous Communications Act 1910.1200

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. If breathing has Stopped administer artificial respiration, preferably mouth-to-mouth. Seek medical attention.

Eyes: Flush eyes with water, lifting upper and lower lids for at least 15 minutes. Seek medical Attention.

Skin: Remove contaminated clothing. Wash with soap and water; get medical attention if irritation Persists. Wash contaminated clothing before reuse.

Ingestion: Do NOT induce vomiting; give 1 to 2 glasses of water; 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: 149°C (300°F)

Method: Pinsky Martin C.C.

Auto-Ignition Temp.: Not Available

Limits of Flammability: LEL: Not Available

UEL: Not Available

Extinguishing Media: Carbon dioxide, foam, dry chemical & water fog.

Special Fire & Unusual Hazards: At higher temperature vapors can cause pressure build up in sealed containers. Vapors heavier than air can concentrate, travel to source of ignitions, and flash back. Residue in container can ignite explosively. Vapors generated during a fire are irritating, self-contained breathing apparatus recommended.

VI. Accidental Release Measures

Action To Take For Spills/ Leaks: Ventilate area, 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 which 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 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 Rubber/Latex gloves. Selection of specific items such as boots and apron will depend on operation. Wear respirator protection whenever airborne concentrations exceed TLV ceilings or TWA, use NIOSH/OSHA approved respirators equipped with an organic vapor cartridge 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):	441	Water/Oil Distribution Coefficient:	N/Av
Percent Volatile:	Ca. 0.1 (226 g/l a+b)	Solubility in Water:	insoluble
Freezing Point (°C):	N/Av	Specific Gravity:	0.98
Vapor Pressure mmHg @25 (°C):	<1	pH:	N/Av
Vapor Density (Air = 1)	10.7	Evaporation Rate:	N/Av
Odor Threshold:	N/Av	Odor:	Pungent
Appearance:	Viscous brown liquid		
N/Av = Not Available	N/Av = Not Applicable	Ca. = Approximate	

X. Stability And Reactivity

HMIS Hazard Rating No. 0

Stability: Stable. Not sensitive to mechanical impact.

Incompatibility: Peroxide, oxidizing, and reducing agents, and sources of ignition.

Hazardous Decomposition Products: Oxides of carbon and nitrogen, and various hydrocarbons from incomplete combustion.

Hazardous Polymerization: Will not occur when handled per instructions.

XI. Toxicity Information

HMIS Hazard Rating No. 1

PRIMARY ROUTE OF ENTRY: Dermal, Eyes.

Effects Of Overexposure

Inhalation:	Inhalation of product vapors or mist may cause irritation of the respiratory tract.
Eyes:	May cause mild irritation.
Skin Contact:	May cause slight irritation.
Skin Absorption:	Absorption through skin is possible and may cause systemic effects.

Ingestion: Moderately toxic by ingestion. Can cause gastrointestinal irritation, nausea, vomiting, diarrhea, headache and drowsiness.

Chronic: Product does not contain carcinogenic materials as defined by OSHA Hazardous Communications Act 1910.1200.

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 of waste material in manner which complies with local, state, province and federal regulation. Landfill if solidified, incineration or dispose at agency approved waste-disposal facilities.

XIV. Transport Information

DOT

Not Regulated

International/Air

Not Regulated

XV. Regulatory Information

Title III Section 302:

Title III Section 311/312:

Title III Section 313:

State: California

No reportable materials.

Health hazard: Immediate

Physical hazard: None

No reportable materials.

No reportable materials.

WHMIS Classification:

Class D, Div. 2, Sub B

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. CAN NOT GIVE ANY GUARANTEES REGARDING INFORMATION FROM OTHER SOURCES, AND EXPRESSLY DOES NOT MAKE ANY WARRANTIES, NOR ASSUMES ANY LIABILITY, FOR ITS USE.