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 9020 PART A

CHEMICALFAMILY: Polyurethane Prepolymer

REVISION DATE: 5/1/08

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.

		EXPOSURE LIMITS			
HAZARDOUS INGREDIENTS	CAS NO	TLV	STEL	PEL	CONTENT
Petroleum Hydrocarbons	64742-95-6	100ppm	N/Av	N/Av	9.22%
Proprietary 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)

Isophorone Diisocyanate	4098-71-9	0.005ppm	0.02mg/m3	0.005ppm	<1.0%
1,2,4-trimethylbenzene	95-63-6	25ppm	N/Av	25ppm	4.68%
Xylene	1330-20-7	100ppm	150ppm	100ppm	0.44%
Cumene	98-82-8	50ppm	N/Av	50ppm	0.22%
Ethyl Benzene	100-41-4	100ppm	125ppm	100ppm	0.073%

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

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: > 43°C (110°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	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 (^{o}C):	N/D	Water/Oil Distribution Coefficient:	N/A
VOC grams / liter:	181	Solubility in Water:	Negligible
Freezing Point (^{o}C):	N/A	Specific Gravity @20° C	1.23
Vapor Pressure @ 20^{o} C	N/A	pH:	N/A
Vapor Density	>air	Evaporation Rate:	N/A
Odor Threshold:	N/A	Odor:	Slight
Appearance:	Pigmented 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 INFORMATON

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

INTERNATIONAL

DOT Proper Shipping Name Flammable liquid, N.O.S (petroleum distillate)
DOT Hazard Class 3 PG III
DOT I.D Number UN 1993 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)	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 COMPLIED 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 9020 PART B
CHEMICALFAMILY:	Amine
REVISION DATE:	MAY 2008
MANUFACTURER:	LymTal International, Inc. 4150 S. Lapeer Rd. Orion, MI 48359

Health	**3**
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.

		EXPOSURE LIMITS			
HAZARDOUS INGREDIENTS	CAS NO	TLV	STEL	PEL	CONTENT
Cyclohexanemethanamine	054914-37-3	N/E	N/E	N/E	60 -80%
Proprietary 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)

None

III. Hazards Identification

HMIS Hazard Rating No. 3
PRIMARY ROUTE OF ENTRY: Eye and skin contact, breathing and ingestion.
Symptoms of Exposure

Skin Contact:	Corrosive. May cause burns resulting in permanent damage.
Eyes:	Corrosive. May cause permanent damage
Inhalation	Minimal inhalation hazard with industrial use.
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. 2
Flash Point: > 77.2 ^{o}C (171 ^{o}F) 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, water spray or 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: CORROSIVE: Avoid contact with skin or eyes. Ventilate area; 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 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 away from heat. Use explosion proof equipment.

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):	200 @ 53mmHg	Water/Oil Distribution Coefficient:	N/A
VOC Content g/l:	0	Solubility in Water:	Reacts slowly
Freezing Point (°C):	-50	Specific Gravity @20° C	0.92
Vapor Pressure @ 20° C	0.4	pH:	N/A
Vapor Density	>1	Evaporation Rate:	N/A
Odor Threshold:	N/A	Odor:	Pungent
Appearance:	Light yellow liquid	Viscosity mPa @25 °C	20 - 30
N/A = Not Available	N/D=NOT Determined	Ca. = Approximate	

X. Stability And Reactivity

HMIS Hazard Rating No. 1

Stability	Stable
Incompatibility:	Oxidizing materials, water, cotton waste, or other combustible materials.
Hazardous Decomposition Products	Isophorone diamine, Isobutyraldehyde (in case of hydrolysis)
Conditions To Avoid	Oxidizing materials, water, cotton waste, or other combustible materials.

XI. Toxicity Information

HMIS Hazard Rating No. 3

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

Effects Of Overexposure

Inhalation:	Minimal inhalation hazard with industrial use
Eyes:	Corrosive. May cause permanent damage.
Skin Contact:	Corrosive to the skin.
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, 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 manner, which complies with all applicable local, state, provincial and federal regulations.

XIV. Transport Information

DOT SHIPPING INFORMATON

DOT Proper Shipping Name	Amine, Liquid, Corrosive, N.O.S (blocked diamine)		
DOT Hazard Class	8 (Corrosive material) PG III		
DOT I.D Number	UN 2735	Label(s)	8 (corrosive)

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