Safety Data Sheet

I. Product and Company Identification

PRODUCT: **ISO-FLEX 900 PART A**

MANUFACTURER:

LymTal International, Inc.
4150 S. Lapeer Rd. Orion, MI 48359
www.lymtal.com
For Non-Emergency Questions,
Hours 8AM To 4PM Eastern Standard Time
(248) 373-8100

EMERGENCY CONTACT: **24-Hour Chemtrec (800)424-9300**

Chemtrec, D.C. Area (800)483-7616

II. Hazards Identification

Classification of the Substance or Mixture:

Resp Sensitizer, CAT 1

Acute Toxicity, CAT 4, Inhalation; Skin Irritation, CAT 2; Eye Irritation, CAT 2B; Skin Sensitisation, CAT 1; STOT Single Exposure, CAT 3, RTI

Signal Word: **DANGER**

Hazard Statements:

H315	Causes Skin Irritation	Skin Corrosion/Irritation Cat 2
H317	May Cause An Allergic Skin Reaction	Skin Sensitizer, Cat 1
H320	Causes Eye Irritation	Eye Damage/Irritation, Cat 2B
H332	Harmful If Inhaled	Acute Toxicity, Cat 4, Inhale
H334	May Cause Allergy Or Asthma Symptoms Or Breathing Difficulties If Inhaled	Resp Sensitizer, Cat 1
H335	May Cause Respiratory Irritation	Stot Single Exposure, Cat 3, RTI

Precautionary Statements:

P102	Keep Out Of Reach Of Children
P103	Read Label Before Use
P202	Do Not Handle Until All Safety Precautions Have Been Read And Understood
P260	Do Not Breathe Dust/Fume/Gas/Mist/Vapors/Spray
P264	Wash Thoroughly After Handling
P270	Do Not Eat/Drink/Smoke While Using This Product
P271	Use Only Outdoors Or In A Well Ventilated Area
P272	Contaminated Work Clothing Should Not Be Allowed Out Of The Workplace
P280	Wear Protective Gloves/Protective Clothing/Eye Protection/Face Protection
P285	In Case Of Inadequate Ventilation Wear Respiratory Protection
P301 +P315	If Swallowed: Get Immediate Medical Advice/Attention
P330	Rinse Mouth

P331	Do Not Induce Vomiting
P363	Wash Contaminated Clothing Before Reuse
P302 + P362+P353	If On Skin: take Off Contaminated Clothing, Rinse Skin With Water/Shower
P332+P313	If Skin Irritation Occurs, Get Medical Advice/Attention
P305+P351+P338	If In Eyes: Rinse Cautiously With Water For Several Minutes, Remove Contact Lenses If Present And Easy To Do. Continue Rinsing.
P304+P340+P314	If Inhaled: Remove Person To Fresh Air And Keep Comfortable For Breathing, Get Medical Advice/Attention If You Feel Unwell.
P309+P311	If Exposed Or If You Feel Unwell: Call A Poison Center Or Doctor
P337+P313	If Eye Irritation Persists: Get Medical Attention
P403+P233	Store In A Well Ventilated Place. Keep Container Tightly Closed
P405	Store Locked Up
P501	Dispose Of Contents/Container In Accordance With Local/Regional/National/International/ Regulations

III. Composition/Information on Ingredients

Ingredients:	**CAS #:**	**CONTENT**
4-4'-methylenediphenyl diisocyanate	101-68-8	30-50%
Poly[oxy(methyl-1,2-ethanedily)], alpha.-hydro-.omega.-hydroxy-, polymer with 1,1'-methylenebis[isocyanatobenzene]	39420-98-9	20-30%
Benzene, 1,1'-methylenebis[isocyanoto-, homopolymer]	39310-05-9	20-30%
Diphenylmethane-2,4'-diisocyanate	5873-54-1	10-20%
California Proposition 65		
4-4'-methylenediphenyl diisocyanate	101-68-8	30-50%

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: >200.0 º F

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. Avoid water contamination in closed containers or confined areas as carbon dioxide is evolved.

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, and 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

Special Instructions	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 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/A		
VOC Content g/l:	**< 12 g / L**	Water/Oil Distribution Coefficient:	N/A
Freezing Point (°C):	N/A	Solubility in Water:	Reacts with water
Vapor Pressure @ 20° C	4 x 10-6	**Specific Gravity @20° C**	**1.18**
Vapor Density	N/A	pH:	N/A
Odor Threshold:	N/A	Evaporation Rate:	N/A
Appearance:	**Amber liquid**	Odor:	**Musty**
N/A = Not Available	N/D=NOT Determined	Ca. = Approximate	

X. Stability And Reactivity

HMIS Hazard Rating No. 0

Reactivity	No dangerous reaction known under conditions of normal use.
Stability	Stable
Incompatibility:	Acids, Amines, Bases, Metals, Water
Hazardous Decomposition Products	Combustion products may include: carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN. In the event of

	extreme heat (>500°C), aniline is suspected of being formed.
Conditions To Avoid	Extremes of temperature and direct sunlight. Exposure to air or moisture over prolonged periods.
Possibility of Hazardous Reactions	Reaction with water (moisture) produces CO2-gas. Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. MDI is insoluble with, and heavier than water and sinks to the bottom but reacts slowly at the interface. A solid water-insoluble layer of polyurea is formed at the interface by liberating carbon dioxide gas.

XI. Toxicity Information

HMIS Hazard Rating No. 2

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

Effects Of Overexposure

Inhalation:	Inhalation of MDI vapors may cause irritation of the mucous membranes of the nose, throat, or trachea, breathlessness, chest discomfort, and difficulty breathing and reduced pulmonary function. Airborne exposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, and asthma like findings or pulmonary edema. Isocyanates have also been reported to cause hypersensitivity pnemonitis, which is characterized by flu like symptoms, the onset of which may be delayed.
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, and vomiting and abdominal pain.
Chronic:	Results from a lifetime study in rats indicate that MDI aerosol was carcinogenic at 6mg/m3, the highest dose tested. This is well above the recommended TLV of 5ppb (0.05mg/m3). Only irritation was noted at the lower concentrations of 0.2 and 1 mg/m3. No birth defects or teratogenic effects were reported in a teratology study with rats exposed to 1, 4, and 12mg/m3 polymeric MDI for 6hr/day on days 6 – 15 of gestation. As a result of repeated overexposure or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate levels at levels well below the PEL / TLV. These symptoms include chest tightness, wheezing, cough, shortness of breath, or asthma attack, which could be immediate or occur several hours after exposure. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent.

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)	
SARA Toxic Chemicals (40 CFR 372)	See section III
Inventory Status	The chemicals in this product are listed on the US TSCA Chemical Substance Inventory and the Canadian Domestic Substances List.
California Proposition 65:	See section III for list of chemicals

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.

Date of Preparation/ Last Revision: 1/26/2019