

Safety Data Sheet

I. Product and Company Identification

PRODUCT: ISOFLEX EPOXY BONDING ADHESIVE 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:



Chronic Hazards To The Aquatic Environment, CAT 2



Skin Irritation, CAT2; Eye Irritation, CAT 2A; Skin Sensitization, CAT 1

Signal Word: **WARNING**

Hazard Statements:

H302	Harmful If Swallowed	Acute Toxicity, Cat 4, Oral
H315	Causes Skin Irritation	Skin Corrosion/Irritation Cat 2
H317	May Cause An Allergic Skin Reaction	Skin Sensitizer, Cat 1
H319	Causes Serious Eye Irritation	Eye Damage/Irritation, Cat 2A
H401	Toxic To Aquatic Life	Aquatic Environmental Hazard, Cat 2

Precautionary Statements:

P101	If Medical Advice Is Needed, Have Product Container Or Label At Hand
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
P233	Keep Container Tightly Closed
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 Clothing Should Not Be Allowed Out Of The Workplace
P273	Avoid Release To The Environment
P280	Wear Protective Gloves/Protective Clothing/Eye Protection/Face Protection
P302 + P362+P353	If On Skin: take Off Contaminated Clothing, Rinse Skin With Water/Shower

P305+P351+P338 If In Eyes: Rinse Cautiously With Water For Several Minutes, Remove Contact Lenses If Present And Easy To Do. Continue Rinsing.

P308+P313 If Exposed Or Concerned: Get Medical Advice/Attention

P332+P313 If Skin Irritation Occurs, Get Medical Advice/Attention

P337+P313 If Eye Irritation Persists: Get Medical Advice/Attention

P362 Take Off Contaminated Clothing And Wash Before Reuse

P391 Collect Spillage

P405 Store Locked Up

P501 Dispose Of Contents/Container In Accordance With Local/Regional/National/International/Regulations.

III. 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.

Ingredients:	CAS #:	CONTENT
Bisphenol-A-(epichlorhydrin) and Epoxy Resin	25068-38-6	20-30%
[[2-Ethylhexyl)oxy]methyl]oxirane	2461-15-6	3-6%
Titanium Dioxide	13463-67-7	2-3%
Silicon Dioxide	14808-60-7	50-70%
Attapulgitte Clay	12174-11-7	6-8%

IV. First Aid Measures

<u>Inhalation</u>	Seek medical attention. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen Clothing and place exposed in a comfortable position.
<u>Eyes</u>	Seek medical attention. Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing.
<u>Skin</u>	Seek medical attention. Wash hands and exposed skin with soap and plenty of water.
<u>Ingestion</u>	Seek medical attention. Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.
<u>Most important symptoms and effects, both acute and delayed:</u>	Shortness of breath, headache, nausea, dizziness, irritation-all routes of exposure. Acute pneumoconiosis or silicosis from overwhelming exposure to crystalline silica dust has occurred. Lungs may be affected by repeated or prolonged exposure to fibers, resulting in fibrosis. This substance is possible carcinogenic to humans. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.
	Indication of any immediate medical attention and special treatment needed.
	If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

V. Fire Fighting Methods

Extinguishing media:

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing agents: None

Advice for firefighter:

Protective equipment: Wear protective eyewear, gloves, and clothing.

Avoid inhaling gases, fumes, dust, mist, and aerosols. Avoid contact with skin, eyes and clothing.

VI. Accidental Release Measures

Action To Take For Spills/Leaks: Ensure adequate ventilation. Ensure that air-handling systems are operational. Should not be released into environment. Prevent from reaching drains, sewer, or waterway. Soak up with inert absorbent material and dispose of as hazardous waste. Wear protective eye wear, gloves, and clothing. Refer to Section VIII. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section XIII. Keep in suitable closed containers for disposal.

VII. Handling And Storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section VIII. Follow proper disposal methods. Refer to Section XIII. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

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

Appearance (physical state, color):	White, gritty paste	Explosion limit lower:	Not determined
Odor:	Slight sweet odor	Explosion limit upper:	Not determined
Odor threshold:	Not determined	Vapor pressure at 20°:	Not determined
PH-value:	Not determined	Vapor density:	Not determined
Melting/freezing point:	Not determined	Relative density:	1.85
Boiling point/range:	Not determined	Solubility:	Insoluble in water
Flash point(closed cup):	Not determined	Partition coefficient: (n-octanol/water)	Not determined
Evaporation rate:	Not determined	Auto/self-ignition temperature:	Not determined
Flammability (solid Gaseous):	Not determined	Decomposition temp:	Not determined
Density at 20°:	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined

X. Stability And Reactivity

Reactivity:

Nonreactive under normal conditions

Chemical stability:

Stable under normal conditions

Possible hazardous reactions:

None under normal conditions

Conditions to avoid:

Incompatible materials

Incompatible materials:

Acids, Bases, Oxidizing Agents, Hydrogen Fluoride, Acetylene and Ammonia

Hazardous decompositions products:

25068-38-6 Strong oxidizing, acids, amines, and bases.

XI. Toxicity Information

Acute Toxicity:

Oral: 25068-38-6 LD50 Oral-rat-13,600 mg/kg
2461-15-6 LD50 Oral-rat-7,800 mg/kg

Inhalation: N/A

Chronic Toxicity:

Inhalation: May cause respiratory irritation.

Skin corrosion/
irritation: 14808-60-7

Serious eye
damage/irritation: 14808-60-7.

Reparatory or skin
sensitization: May cause skin sensitization in some individuals

Carcinogenicity: N/A

Reproductive toxicity: No additional information

STOT-single and
repeated exposure: 2461-15-6: Inhalation-may cause reparatory irritation

Additional toxicological
Information: No additional information

XII. Ecological Information

Ecotoxicity:

2461-15-6: LC50-Carassius(goldfish)=14 mg/l-24 h

13463-67-7: LC50-Other fish->1,000 mg/l-96 h

13463-67-7: EC50-Daphnia magna (Water flea)->1,000 mg/l-48 h

Persistence and degradability:

25068-38-6: Result: According to the results of test of biodegradability this product is not readily biodegradable. 1217-11-7: long term degradation products may arise.

Bioaccumulative potential: No additional information

Mobility in soil: No additional information

Other adverse effects: No additional information

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**

INTERNATIONAL

Proper Shipping Name Environmentally hazardous substance, Liquid, n.o.s.

Hazard Class 9 PG III

I.D. Number UN 3082 Label(s)

XV. Regulatory Information

United States

SARA Section 311/312

(Specific toxic chemical listings): Acute

SARA Section 313

(Specific toxic chemical listings): None of the ingredients are listed

RCRA (hazardous waste code):

None of the ingredients are listed

TSCA (Toxic substance control act):

None of the ingredients are listed

CERCLA (Comprehensive Environmental
Response, Compensation, and Liability Act):

None of the ingredients are listed

Proposition 65 (California):

Chemicals known to cause cancer;

None of the ingredients are listed

Chemicals known to cause reproduction toxicity for
females:

None of the ingredients are listed

Chemicals known to cause reproduction toxicity for
males:

None of the ingredients are listed

Chemicals known to cause developmental toxicity:

None of the ingredients are listed

Canada

Canadian Domestic Substance list (DSL)

None of the ingredients are listed

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.

Date of Preparation/ Last Revision: 10/26/2015

Safety Data Sheet

I. Product and Company Identification

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II. Hazards Identification

Classification of the Substance or Mixture:



Skin Irritation, CAT 2; Eye Irritation, CAT 2A; Skin Sensitization, CAT 1; Specific target organ toxicity following single exposure, CAT 1; Acute toxicity (oral, dermal, inhalation), CAT 1



Reproductive toxicity, CAT 2



Skin Corrosion/Irritation-Skin Irritation, CAT 2; Skin Sensitizer, CAT 1; Eye Irritation, CAT 2; STOT single exposure, CAT 3; Acute Toxicity(oral), CAT 4; Reproductive Toxicity, CAT 2

Signal Word: **DANGER**

Hazard Statements:

H302	Harmful If Swallowed	Acute Toxicity, Cat 4, Oral
H315	Causes Skin Irritation	Skin Corrosion/Irritation Cat 2
H317	May Cause An Allergic Skin Reaction	Skin Sensitizer, Cat 1
H319	Causes Serious Eye Irritation	Eye Damage/Irritation, Cat 2A

Precautionary Statements:

P101	If Medical Advice Is Needed, Have Product Container Or Label At Hand
P102	Keep Out Of Reach Of Children
P103	Read Label Before Use
P201	Obtain Special Instructions 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 Clothing Should Not Be Allowed Out Of the Workplace
P273	Avoid Release To The Environment
P280	Wear Protective Gloves/Protective Clothing/Eye Protection/Face Protection
P281	Wear Personal Protective Equipment As Required
P302 + P362+P353	If On Skin: take Off Contaminated Clothing, Rinse Skin With Water/Shower
P304+P340+P314	If Inhaled: Remove Person To Fresh Air And Keep Comfortable For Breathing, Get Medical Advice/Attention If You Feel Unwell.
P305+P351+P338	If In Eyes: Rinse Cautiously With Water For Several Minutes, Remove Contact Lenses If Present And Easy To Do. Continue Rinsing.
P308+P313	If Exposed Or Concerned: Get Medical Advice/Attention
P332+P313	If Skin Irritation Occurs, Get Medical Advice/Attention
P337+P313	If Eye Irritation Persists: Get Medical Advice/Attention
P362	Take Off Contaminated Clothing And Wash Before Reuse
P391	Collect Spillage
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

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.

<u>Ingredients:</u>	<u>CAS #:</u>	<u>CONTENT</u>
Silicon Dioxide	14808-60-7	60-70%
Polyamido Amine	68953-36-6	25-30%
Attapulgite Clay	12174-11-7	5-7%

IV. First Aid Measures

<u>Inhalation</u>	Remove victim from exposure and to fresh air. Give artificial respiration if necessary. If difficulty with breathing, administer oxygen. Seek medical assistance if cough or other symptoms appear. Loosen clothing as necessary and position individual in a comfortable position.
<u>Eyes</u>	Protect unexposed eye. Flush exposed eye(s) gently with cold water for a minimum of 15 minutes, lifting lower and upper eye lids throughout. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.
<u>Skin</u>	Immediately remove contaminated clothing. Wash hands and exposed skin thoroughly with soap and plenty of water. If irritation persists seek medical attention. Wash contaminated clothing before reuse.
<u>Ingestion</u>	Rinse mouth with water. Do not induce vomiting; get immediate medical attention, if vomiting occurs spontaneously keep head below hips to prevent aspiration of liquids into lungs. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists. Do not give anything by mouth to an unconscious person

Important symptoms and effects, both acute and delayed:
Irritation, headache, nausea, shortness of breath, cough, dizziness. Lungs may be affected by repeated or prolonged exposure to fibers, resulting in fibrosis. This substance is possibly carcinogenic to humans. Possible development of pneumoconiosis.

V. Fire Fighting Methods

HMIS Hazard Rating No. 1

Flash Point: Not Available

Method: N/A

General Hazard: None

Auto-Ignition Temp.: Not Available

Limits of Flammability

LEL: Not Available

UEL: Not available

Extinguishing Media

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. (If large quantities of combustibles are involved, use water in flooding quantities as spray and fog. Use water spray to knock-down vapors.

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: Water spill: neutralize with agricultural lime (CaO), crushed limestone (CaCO₃), or sodium bicarbonate (NaHCO₃). If dissolved, in region of 10 ppm or greater concentration, apply activated carbon at ten times the spilled amount. Use mechanical methods to collect and containerize for disposal (see Section XIII). Ensure adequate ventilation. Ensure that air-handling systems are operational. Land spill: Dig a pit, pond, lagoon, holding area (should be sealed with an impermeable flexible membrane liner) to contain liquid or solid material. Dike surface flow using soil, sand bags, foamed polyurethane, or foamed concrete. Absorb bulk liquid with fly ash, or cement powder. Neutralize as noted for water spill.

Environmental precautions: Should not be released into environment. Build dikes to contain flow as necessary. Prevent from reaching drains, sewer, or waterway. Collect contaminated soil for characterization per Section XIII.

Waste Disposal Method: Sweep up and shovel. Containerize for disposal. Refer to Section XIII. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal. Wear protective eyewear, gloves, and clothing. Refer to Section VIII. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Personal protection: P2 filter respirator for harmful particles. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect solids in powder form using vacuum with (HEPA filter). If contact with the material anticipated, wear appropriate chemical protective clothing. Avoid bodily contact with the material. Do not handle broken packages unless wearing appropriate personal protective equipment. Wash away any material which may have contacted the body with copious amounts of water or soap and water. Do not handle broken packages unless wearing appropriate personal protective equipment.

VII. Handling And Storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section VIII. Follow proper disposal methods. Refer to Section XIII. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

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

Appearance (physical state, color):	Black, gritty paste	Explosion limit lower:	Not determined
Odor:	Slight ammonia	Explosion limit upper:	Not determined
Odor threshold:	Not determined	Vapor pressure at 20°:	Not determined
PH-value:	Not determined	Vapor density:	Not determined
Melting/freezing point:	Not determined	Relative density:	1.77
Boiling point/range:	Not determined	Solubility:	Not determined
		Partition coefficient: (n-octanol/water)	Not determined
Flash point(closed cup):	Not determined	Auto/self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temp:	Not determined
Flammability (solid Gaseous):	Not determined	Viscosity:	a. Kinematic: Paste b. Dynamic: Paste
Density at 20°:	Not determined		

X. Stability And Reactivity

Reactivity:

Nonreactive under normal conditions

Chemical stability:

Stable under normal conditions. Chemically inert, properties are inert; affected by change in PH

Possible hazardous reactions:

None under normal conditions

Conditions to avoid:

Incompatible materials

Incompatible materials:

Strong Acids, Strong Bases, Oxidizing Agents, Hydrogen Fluoride

Hazardous decompositions products:

Carbon oxides, Nitrogen oxides, Ammonia. When heated to decomposition it emits acrid smoke and irritating fumes

XI. Toxicity Information

HMIS Hazard Rating No. 2

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

Effects Of Overexposure

Inhalation:

Vapors may be corrosive to the upper respiratory tract.

Eyes:

May cause severe damage including blindness.

Skin Contact:

Irritating to the skin. 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 OSHA Hazardous Communications Act 1910.1200.

XII. Ecological Information

Ecotoxicity:

Fish(acute 84852-15-3): 96 hr LC50 Pimephales promelas: 0.135 MG/L {flow-through};

96 hr LC50 lepomis macrochirus: 0.1351 mg/l {flow-through}

Crustacea (acute 84852-15-3): 48 hr EC50 Daphnia magna: 0.14 mg/l

Algae (acute 84852-15-3): 96 hr EC50 Pseudokirchneriella subcapitata: 0.36-0.48 mg/l {static}; 72 hr EC50 Pseudokirchneriella subcapitata: 0.16-0.72 mg/l {static}; 72 EC 50

Desmodesmus subspicatus: 1.3 mg/l

Persistence and degradability:

Bioaccumulative potential: BCF (84852-15-3): 271 species: fish

Mobility in soil: No additional information

Other adverse effects: no additional information

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**

INTERNATIONAL

Proper Shipping Name Environmentally hazardous substance, Liquid, n.o.s.

Hazard Class 9 PG III

I.D. Number UN 3082 Label(s)

XV. Regulatory Information

United States

SARA Section 311/312

(Specific toxic chemical listings):

None of the ingredients are listed

SARA Section 313

(Specific toxic chemical listings):

84852-15-3 1.0% de minimis concentration
(listed under chemical category Nonylphenol)

RCRA (hazardous waste code):

None of the ingredients are listed

TSCA (Toxic substance control act):

All ingredients are listed

CERCLA (Comprehensive Environmental
Response, Compensation, and Liability Act):

None of the ingredients are listed

Proposition 65 (California):

Chemicals known to cause cancer;

None of the ingredients are listed

Chemicals known to cause reproduction toxicity for
females:

None of the ingredients are listed

Chemicals known to cause reproduction toxicity for
males:

None of the ingredients are listed

Chemicals known to cause developmental toxicity:

None of the ingredients are listed

Canada

Canadian Domestic Substance list (DSL)

None of the ingredients are listed

Canadian NPRI ingredient disclosure list (limit 0.1%) None of the ingredients are listed

Canadian NPRI ingredient disclosure list (limit 1.0%) 148-8-60-7 Quartz

XVI. Other Information

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Date of Preparation/ Last Revision: 10/26/2015