GLENDO LLC

SAFETY DATA SHEET

1. PRODUCT & COMPANY INFORMATION

1.1 PRODUCT IDENTIFIER(S)

Product Name: Urethane Material

Stock Number: 004-726

1.3 COMPANY INFORMATION

Distributor's Name: Glendo LLC Address: 900 Overlander Road, Emporia, KS 66801

Phone: (620) 343-1084

2. HAZARDS IDENTIFICATION

PART A

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Acute toxicity, oral-Category 4 Acute toxicity, inhalation-Category 4 Acute toxicity, dermal-Category 4 Skin irritation-Category 2 Eye irritation-Category 2A Specific target organ toxicity-single exposure-Category 3 (respiratory) Carcinogenicity-Category 2 Reproductive toxicity-Category 1B **Pictogram:**



Signal Word: Danger GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS Health Hazards

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

General Precautions

P101 If medical advice is needed, have product container or label at hand.

2. HAZARDS IDENTIFICATION (continued)

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

Prevention Precautions

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response Precautions

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P322 Rinse mouth.

P330 If skin irritation occurs: Get medical advice/attention.

P332 + P313 If eye irritation persists: Get medical advice/attention.

P337 + P313 Take off contaminated clothing.

P362 Store in a well-ventilated place. Keep container tightly closed.

Storage Precautions

P405 Store locked up.

Disposal Precautions

P501 Dispose of contents/container to local, state and federal laws

PART B

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Acute toxicity, dermal – Category 1 Acute toxicity, oral – Category 2 Acute toxicity, inhalation – Category 2 Carcinogenicity – Category 2 Reproductive toxicity – Category 1B Specific Target Organ Toxicity – Category 2 Acute aquatic hazard – Category 1 Chronic aquatic hazard – Category 1 **Pictogram:**



Signal Word: Danger

2. HAZARDS IDENTIFICATION (continued)

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health Hazards

H300 + H310 Fatal if swallowed or in contact with skin

H330 Fatal if inhaled

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs (gastrointestinal and kidneys) through prolonged or repeated exposure.

Environmental Hazards

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

General Precautions

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.

Prevention Precautions

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response Precautions

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P306 + P360 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P363 Wash contaminated clothing before reuse.

Storage Precautions

P405 Store locked up.

Disposal Precautions

P501 Dispose of contents/container according to local, state and federal laws.

Hazards not otherwise classified (HNOC) or not covered by GHS - none known

3. COMPOSITION / INFORMATION ON INGREDIENTS

PART A

CAS Number	Component	% by Weight
9057-91-4	Poly[oxy(methyl-1,2-ethanediyl)], α -hydro- Ω -hydroxy, polymer with 1,3 diisocyanatomethylbenzene	> 80

3. COMPOSITION / INFORMATION ON INGREDIENTS (continued)

68515-48-0	Diisononyl phthalate	< 25
26471-62-5	Toluene diisocyanate	<1

PART B

CAS Number	Component	% by Weight
28553-12-0	Diisononyl phthalate	5% - 50%
26545-49-3	Phenylmercury neodecanoate	0.1% - 0.4%

4. FIRST AID MEASURES

PART A

4.1 DESCRIPTION OF FIRST AID MEASURES

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water.

Ingestion: Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

After first aid, get appropriate in-plant, paramedic, or community medical support.

PART B

4.1 DESCRIPTION OF FIRST AID MEASURES

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water.

Ingestion: Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

After first aid, get appropriate in-plant, paramedic, or community medical support.

5. FIREFIGHTING MEASURES

PART A

Flammable Classification: Non-Flammable

Extinguishing Media: Water Fog, Dry Chemical, and Carbon Dioxide Foam

Unusual Fire and Explosion Hazards: None known.

Fire Fighting Instructions: Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam.

Further Information: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure demand or positive-pressure mode.

PART B

Flammable Classification: Non-Flammable

Extinguishing Media: Water Fog, Dry Chemical, and Carbon Dioxide Foam

Unusual Fire or Explosion Hazards: None known.

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3. COMPOSITION / INFORMATION ON INGREDIENTS (continued)

Fire-Fighting Instructions: Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam.

Further information: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure demand or positive-pressure mode.

6. ACCIDENTAL RELEASE MEASURES

PART A

SPILL AND LEAK PROCEDURES:

Only properly protected personnel should remain in the spill area; dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

ENVIRONMENTAL PRECAUTIONS:

No special environmental precautions required.

PART B

Emergency procedure: Immediately turn off or isolate any source of ignition. Only properly protected personnel should remain in the spill area.

Personal precautions: Avoid breathing vapor. Avoid contact with skin, eye or clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use explosion proof equipment. Avoid inhalation of dust and contact with skin and eyes. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains or unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and materials for containment and cleaning up: Put on appropriate protective gear including NIOSH/MSHA approved self-contained breathing apparatus, rubber boots and heavy rubber gloves. Dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

Follow applicable OSHA regulations (29 CFR 1910.120)

7. HANDLING AND STORAGE

PART A

HANDLING PRECAUTIONS:

Use good general housekeeping procedures. Wash hands after use.

STORAGE REQUIREMENTS:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Avoid water contamination.

PART B

Handling Precautions: Use good general housekeeping procedures. Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements: Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

7. HANDLING AND STORAGE (continued)

Storage Requirements: Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Avoid water contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION / CONTROL PARAMETERS

PART A

Respiratory Protection: Respiratory protection is not normally required when using this product with adequate ventilation. Should a respirator be needed, follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators equipped with organic vapor cartridges.

Hand Protection: Should hand protection be needed, wear any liquid-tight gloves such as butyl rubber, neoprene or PVC.

Eye Protection: Safety glasses with side shields per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Other Protective Clothing/Equipment: Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Wash thoroughly after handling.

PART B

Respiratory Protection: Should a respirator be needed, follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators equipped with organic vapor cartridges.

Skin Protection: Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, and dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over- boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Eye Protection: Safety glasses with side shields per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Other Protective Clothing/Equipment: Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

	PART A	PART B
Appearance :	clear yellow viscous liquid	clear to amber liquid
Odor/Threshold:	sharp pungent odor	sharp pungent odor
pH:	N.A. (non-aqueous)	N.A. (non-aqueous)
Melting Point/Freezing Point:	N.A.	N.A.
Low/High Boiling Point:	N.A.	N.A.

9. PHYSICAL AND CHEMICAL PROPERTIES (continued)

Flash Point:	>270 °F >390 °F	
Evaporation Rate:	Not available	Not available
Flammability:	f.p. at or above 200 °F	f.p. at or above 200 °F
UEL/LEL:	Not available	Not available
Vapor Pressure:	None (Polymeric Resin)	None (Polymeric Resin)
Vapor Density (Air=1):	>1	>1
Specific Gravity (H2O=1, at 4 °C):	1.04	1.0 – 1.05
Water Solubility:	Insoluble	Insoluble
Partition coefficient:	Not available	Not available
Auto-ignition temperature:	Not available	Not available
Decomposition temperature:	Not available	Not available
Viscosity:	50,000 centipoise 300 - 500 centipoise	
% Volatile:	Nil	Nil

10. STABILITY AND REACTIVITY

PART A

Stability: These products are stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong bases, and acids.

Hazardous Decomposition Products: Thermal oxidative decomposition can produce carbon oxides and traces of incompletely burned carbon compounds.

PART B

Stability: These products are stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong bases, and acids.

Hazardous Decomposition Products: Thermal oxidative decomposition can produce carbon oxides and traces of incompletely burned carbon compounds.

11. TOXICOLOGICAL INFORMATION

PART A

Skin Corrosion/Irritation: no data

Serious Eye Damage/Irritation: no data

Respiratory/Skin Sensitization: no data

Germ Cell Mutagenicity: no data

Carcinogenicity: No component of this product at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGH, NTP or OSHA.

Reproductive Toxicity: no data

Specific Target Organ Toxicity - Single Exposure: no data

Specific Target Organ Toxicity – Repeated Exposure: no data

Aspiration Hazard: no data

Acute Toxicity: no data

Chronic Exposure: no data

11. TOXICOLOGICAL INFORMATION (continued)

Potential Health Effects - Miscellaneous: no data

PART B

Skin Corrosion/Irritation: no data Serious Eye Damage/Irritation: no data Respiratory/Skin Sensitization: no data Germ Cell Mutagenicity: no data Carcinogenicity: No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC, NTP or OSHA. Reproductive Toxicity: no data Specific Target Organ Toxicity – Single Exposure: no data Specific Target Organ Toxicity – Repeated Exposure: no data Aspiration Hazard: no data Acute Toxicity: no data Chronic Exposure: no data Potential Health Effects – Miscellaneous: no data

12. ECOLOGICAL INFORMATION

PART A Toxicity: no data Persistence and Degradability: no data Bioaccumulative Potential: no data Mobility in Soil: no data Other Adverse Effects: no data PART B Toxicity: no data Persistence and Degradability: no data Bioaccumulative Potential: no data

Mobility in Soil: no data

Other Adverse Effects: no data

13. DISPOSAL CONSIDERATIONS

PART A

Disposal: Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore to not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

PART B

Disposal: Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore to not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

14. TRANSPORT INFORMATION

PART A

DOT	ΙΑΤΑ	IMDG
Not Regulated	Not Regulated	Not Regulated

PART B

DOT	IATA	IMDG
Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (butyl benzyl phthalate mixture)	Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (butyl benzyl phthalate mixture)	Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (butyl benzyl phthalate mixture)
UN: 3082	UN: 3082	UN: 3082
HC : 9	HC: 9	HC : 9
PG: III	PG: 111	PG:
(LQ is 5 L)	(LQ is 5 L)	(LQ is 5 L)

15. REGULATORY INFORMATION

PART A

UNITED STATES EPA REGULATIONS:

CERCLA Hazardous Substance (40 CFR 302.4) listed specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

Chemical Name	RQ	% Reportable Component
Toluene Diisocyanate	100 lbs.	<1.0

SARA EHS (Extremely Hazardous Substance) (40 CFR 355):

Chemical Name	CAS #	% by Weight:
Toluene Diisocyanate	26471-62-5	<1.0

These products contain the following chemicals that are subject to release reporting requirements under **section 313 of SARA Title III.**

Chemical Name	CAS #	% by Weight:
Toluene Diisocyanate	26471-62-5	<1.0

TSCA Inventory Status (40 CFR710): All components of this formulation are listed in the TSCA Inventory.

California Proposition 65: This product contains a chemical which has been identified by the state of California to cause cancer, birth defects or other reproductive harm.

PART B

TSCA Inventory Status (40 CFR710): All components of this formulation are listed in the TSCA Inventory.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

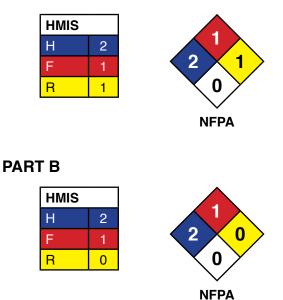
SARA 313 Components: The following is subject to reporting levels established by SARA Title III, Section 313:

Chemical Name	CAS #	% by Weight:
Mercury as part of phenylmercury neodecanoate	7439-97-6	0.18%

SARA 311/312 Hazards: acute health hazard, chronic health hazard

California Proposition 65: This product contains chemicals which have been identified by the state of California to cause cancer, birth defects or other reproductive harm.

16. OTHER INFORMATION PART A



Glossary: ACGIH-American Conference of Governmental Industrial Hygienists; ANSI-American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS-Chemical Abstract Service; Chemtrec-Chemical Transportation Emergency Center (US); CHIP-Chemical Hazard Information and Packaging; DSL-Domestic Substances List; EC-Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; GHS-Globally Harmonized System of Classification and Labelling of Chemicals; HMIS-Hazardous Material Information Service; IATA-International Air Transport Association; IMDG-International Maritime Dangerous Goods Code; LC-Lethal Concentration; LD-Lethal Dose; LEL-Lower Explosion Level; NFPA-National Fire Protection Association; OEL Occupational Exposure Limit; OSHA-Occupational Safety and Health Administration, US Dept. of Labor; PEL-Permissible Exposure Limit; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ-Texas Commission on Environmental Quality; TLV-Threshold Limit Value; TSCA-Toxic Substances Control Act Public Law 94-469; TWA-Time Weighted Value; UEL-Upper Explosion Level; US DOT-US Department of Transportation; WHMIS Workplace Hazardous Materials Information System.

FURTHER INFORMATION

User is granted the ability to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. GLENDO, LLC. shall not be held liable for any damage resulting from handling or from contact with the above product.

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