# Leepoxy Plastics, Inc.

#### SAFETY DATA SHEET

# 1. IDENTIFICATION

Product Identifier	LEECAST 23-130-5 A
Issue date	November 21, 2016
Recommended use	Urethane Encapsulant
Recommended restrictions	No data
	Leepoxy Plastics, Inc.
Manufacturer information	3706 W. Ferguson Road
	Fort Wayne, IN 46809
Emergency telephone number	(260) 625-4508

# 2. HAZARDS IDENTIFICATION

Hazard risk classification	Skin corrosion/irritation – category 2
	Serious eye damage/irritation – category 2A
	Skin sensitization – category 1
Label information pictogram	<u>!</u>
Signal word	Warning
Hazard risk statement	Causes skin irritation
	Causes serious eye irritation
	May cause allergic skin reaction
Precautionary statement	Wash hands thoroughly after handling.
Prevention	Do not eat, drink or smoke when using this product.
	Wear protective gloves/protective clothing/eye protection/face
	protection.
	Avoid breathing dust/fumes/gas/mist/vapors/spray.
	Contaminated work clothing should not be allowed out of the workplace.
	Avoid release to the environment.
Precautionary statements	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Response	Rinse mouth.
	IF ON SKIN: Wash with plenty of soap and water.
	If skin irritation occurs: get medical advice/attention.
	Take off contaminated clothing and wash before reuse.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses if present and easy to do. Continue rinsing.
	If eye irritation persists: get medical advice/attention.
	Wash contaminated clothing before reuse.
Precautionary statements	Store in a well ventilated place.
Storage	Store in a well ventuated place.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Weight %
Hydroxy terminated homopolymer	Trade Secret	30 – 70

#### 4. FIRST AID MEASURES

Eye contact	Flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Seek medical attention.
Skin contact	Immediately remove contaminated clothing or shoes, wash with plenty of water for at least 15 minutes
Inhalation	Move person to fresh air area and provide oxygen if breathing is difficult. Seek medical attention.
Ingestion	Do not induce vomiting because of risk of aspiration. Rinse mouth with water. Consult a physician if effects occur.
Notes to physician	Treat symptomatically.
General advice	Get medical attention if any discomfort develops

# 5. FIRE FIGHTING MEASURES

Personal precautions, protective equipment	Remove all sources of ignition. Use personal protective equipment.
Suitable extinguishing media	Dry chemical, carbon dioxide, water, foam.
Unsuitable extinguishing media	No data
Specific hazards arising from the chemical	In case of fire, carbon monoxide might be formed.
Special protective equipment and precautions for firefighters	Isolate from heat, electrical equipment, sparks and open flames. Firefighters should be equipped with butyl rubber boots, gloves and body suit and a self-contained breathing apparatus.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Use protective equipment as required. Avoid skin contact or inhalation
Environmental precautions	Store away from water supply and drainage
Methods for containment	Ventilate the area. Stop leak if you can do so without risk. Dike the spilled material where this is possible.
Release measures	Keep away from open flames, hot surfaces and sources of ignition.
Methods for cleaning up	Small spills: Absorb spillage with non-combustible absorbent material.  Large spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Wash area with soap and water.

# 7. HANDLING AND STORAGE

Precautions for safe handling	Keep in a cool, well-ventilated place and keep container closed.
Conditions for safe storage	Avoid contact with skin and eyes. Use with adequate ventilation. Keep away from
	heat, flame, spark and high temperature. Store in a cool dry area.

#### 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Domestic regulation	No data
ACGIH (TLV)	No data
OSHA (PEL)	No data
NIOSH (REL)	No data

NIOSH (IDLH)	No data
ACGIH	No data
Appropriate engineering controls	Provide adequate ventilation and minimize the risk of inhalation of vapors and mists.
Respiratory protection	Never exceed the national Occupational Exposure Limit. Use local exhaust
	ventilation or handle in a ventilated area.
Eye protection	Wear safety glasses. If there is a splash risk, wear safety goggles or face shield.
Hand protection	Use chemical resistant gloves.
Skin protection	Wear suitable protective clothing.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Amber
Odor	Odorless
Odor threshold	No data
рН	No data
Melting point/freezing point	No data
Initial boiling point and boiling range	≥ 200°C
Flash point	No data
Evaporation rate	No data
Flammability (solid, gas)	No data
Upper/lower flammability	No data
Vapor pressure	< 0.1 mm Hg (25°C)
Solubility	No data
Vapor density	No data
Relative density	0.9
Partition coefficient	No data
Auto-ignition temperature	No data
Viscosity	1,500 cps

# 10. STABILITY AND REACTIVITY

Chemical stability	Stable at normal conditions
Possibility of hazardous reactions	No data
Conditions to avoid	
	Excessive heating or ignition sources
Incompatible materials	Mineral and organic acids, amines, bases, oxidizing agents
Hazardous decomposition products	May produce hazardous carbon oxides, chloro hydrogen

# 11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure:	
by respiratory organ	May cause respiratory organ irritation
by mouth	No data
by skin contact	May cause skin irritation
by eye and contact	May cause eye irritation

#### 12. ECOLOGICAL INFORMATION

Product data	No data
Component data	No data
Mobility	No data
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

12	DICDOCVI	CONSIDERATIONS

Disposal methods	Dispose in accordance with all federal, state and local applicable regulations.
Waste from residues unused products	Dispose in accordance with all federal, state and local applicable regulations.
Contaminated packaging	Dispose in accordance with all federal, state and local applicable regulations.

#### 14. TRANSPORT INFORMATION

IATA	Not regulated as dangerous goods.
IMDG/IMO	Not regulated as dangerous goods.
DOT	Not regulated as dangerous goods.

#### 15. REGULATORY INFORMATION

Country	Inventory List	Status
Canada	Domestic Substances List (DSL)	Listed
Europe	European Inventory of Existing Commercial Chemical Substances (EINCES)	Listed
United States	Toxic Substances Control Act (TSCA) Inventory	Listed
Japan	ENCS	Listed
China	IECSD	Listed
Australia	AICS	Listed

SARA 311/312	Information	Status
	Chronic health hazard	None
	Acute health hazard	None
	Fire hazard	None
	Sudden pressure	None
Section 302	Extremely hazardous material	None
CERCLA	Hazardous substance	None
Section 313	Toxic chemicals	None

#### 16. OTHER INFORMATION

HMIS Hazard rating: Health = 1; Fire = 1; Reactivity = 0

Issuing date	November 21, 2016
Revision number	Release
Revision date	N/A

**DISCLAIMER:** The information presented herein is based on data considered to be accurate as of the date of the presentation of this Material Safety Data Sheet. However, MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

# Leepoxy Plastics, Inc.

#### SAFETY DATA SHEET

# 1. IDENTIFICATION

Product Identifier	LEECAST 23-130-5 B
Issue date	November 21, 2016
Recommended use	Urethane curative
Recommended restrictions	No data
	Leepoxy Plastics, Inc.
Manufacturer information	3706 W. Ferguson Road
	Fort Wayne, IN 46809
Emergency telephone number	(260) 625-4508

#### 2. HAZARDS IDENTIFICATION

Hazard risk classification	Acute toxicity: Inhalation – category 4
	Skin corrosion/irritation – category 2
	Respiratory sensitization – category 1
	Serious eye damage/irritation – category 2B
	Skin sensitization – category 1
	STOT (single) – category 3 (Respiratory tract irritation)
Label information pictogram	
Signal word	Danger
Hazard risk statement	Harmful if inhaled
	Causes skin and eye irritation
	May cause allergy or asthma symptoms or breathing difficulties if inhaled
	May cause an allergic skin reaction
	May cause respiratory irritation
Precautionary statement Prevention	Avoid breathing dust/fumes/gas/mist/vapors/spray.
	Use only outdoors or in a well-ventilated area.
	In case of inadequate ventilation wear respiratory protection.
	Wear protective gloves/protective clothing/eye protection/face protection.
	Do not eat, drink or smoke when using this product.
	Contaminated work clothing should not be allowed out of the workplace.
Precautionary statements response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses if present and easy to do. Continue rinsing. Immediately call a POISON
	CENTER or doctor/physician
	IF ON SKIN: Wash with plenty of soap and water.
	If skin irritation occurs: get medical advice/attention.
	Take off contaminated clothing and wash before reuse.
	Wash contaminated clothing before reuse.
	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If
	experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.
	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	Rinse mouth.
Precautionary statements storage	Store in a well ventilated place.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Weight %
Diphenylmethane 4,4'-diisocyanate	101-68-8	30 – 70
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	30 – 70
Diphenylmethane-2,4'-diisocyanate	5873-54-1	5 - 15

#### 4. FIRST AID MEASURES

Eye contact	Flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Seek medical attention.
Skin contact	Immediately remove contaminated clothing or shoes, wash with plenty of soap and water for at least 15 minutes
Inhalation	Move person to fresh air area and provide oxygen if breathing is difficult. If breathing has stopped, perform artificial respiration. Seek medical attention.
Ingestion	Rinse mouth with water. Do not induce vomiting. Immediately call a physician or local poison control center.
Symptoms	Contact may cause irritation and redness. Direct eye contact may irritation.  Harmful if inhaled. May cause respiratory irritation. This product is a respiratory irritant and potential respiratory sensitizer. The onset of the respiratory symptoms may be delayed for several hours after exposure.
Notes to physician	Treat symptomatically.
General advice	Get medical attention if any discomfort develops

#### 5. FIRE FIGHTING MEASURES

Personal precautions, protective equipment	Remove all sources of ignition. Use personal protective equipment.
Suitable extinguishing media	Foam, CO <sub>2</sub> , or dry powder.
Unsuitable extinguishing media	Water may be used if no other available and then in copious quantities.  Reaction between water and hot isocyanate may be vigorous. Prevent washing from entering water courses, keep fire exposed containers cool by spraying with water.
Specific hazards arising from the chemical	In case of fire, irritating vapors, carbon monoxide and/or carbon dioxide may be formed. In a fire or if heated, a pressure increase will occur and the container may burst.
Special protective equipment and precautions for firefighters	Isolate from heat, electrical equipment, sparks and open flames. Firefighters should be equipped with butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus.
Remark	Due to reaction with water, producing CO <sub>2</sub> gas, a hazardous build-up of pressure could result if contaminated containers are resealed. Containers may burst if overheated.

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Use protective equipment as required. Avoid skin contact. Avoid breathing vapors or mist.	
Environmental precautions	Store away from water supply and drainage	
Methods for containment	Stop leak if you can do so without risk. Ventilate the spill area. Dike the spilled material where this is possible.	
Release measures	Keep away from open flames, hot surfaces and sources of ignition.	
Methods for cleaning up	Absorb spillages with sand, earth or other suitable absorbent material. Leave to react or 30 minutes. Shovel into open-top drums. Wash spillage area with water.	

# 7. HANDLING AND STORAGE

Precautions for safe handling	Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process involving this product. Do not get in eyes or on skin or clothing. Contaminated clothing should not leave the work area.
Conditions for safe storage	Keep container tightly closed in a cool, well-ventilated place. Keep away from moisture. Due to a reaction with water producing $CO_2$ gas, a hazardous build-up of pressure could result if contaminated containers are resealed. Uncontaminated containers, free of moisture should be blanketed with dry nitrogen before resealing. Do not store in containers made of copper, copper alloys or galvanized surfaces.

# 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Chemical Name	Diphenylmethane 4,4'-diisocyanate	
ACGIH (TLV)	TWA: 0.005 ppm	
OSHA (PEL)	CEIL: 0.02 ppm	
NIOSH (REL)	No data	
NIOSH (IDLH)	No data	
ACGIH	No data	
Appropriate engineering controls	Provide adequate ventilation and minimize the risk of inhalation of vapors and mists.	
	Diisocyanates can only be smelled if the occupational exposure limit has been	
	exceeded considerably.	
Despiratory protection	Never exceed the national Occupational Exposure Limit. Use local exhaust	
Respiratory protection	ventilation or handle in a ventilated area.	
Eye protection	Wear approved safety goggles.	
Hand protection	Use chemical resistant gloves.	
Skin protection	Wear suitable protective clothing.	

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Brown
Odor	No data
Odor threshold	No data
pH	No data
Melting point/freezing point	No data
Initial boiling point and boiling range	> 300°C (> 572°F) decomposes
Flash point	203°C (397°F) Closed cup
Evaporation rate	No data
Flammability (solid, gas)	No data
Upper/lower flammability	No data
Vapor pressure	No data
Solubility	No data
Vapor density	No data
Specific gravity	1.2
Partition coefficient	No data
Auto-ignition temperature	>600°C
Viscosity	50 – 250 cps

10	STABILITY	VIID	DEVCTI	/ITV

Chemical stability	Stable at normal conditions	
Possibility of hazardous reactions	Reaction with water (moisture) produces $CO_2$ gas. Exothermic reaction with materials containing active hydrogen groups. This reaction becomes more vigorous at higher temperatures.	
Hazardous polymerization	Does not occur	
Conditions to avoid	Avoid high temperature	
Incompatible materials	Water, alcohols, amines, bases and acids	
Hazardous decomposition products	May produce hazardous nitrogen oxides, carbon monoxide, carbon dioxide and/or HCN	

#### 11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure:		
by respiratory organ	Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
by mouth	Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.	
by skin contact	Causes skin irritation. May cause allergic skin reaction	
by eye and contact	Causes eye irritation.	
Carcinogenicity	Not listed as a carcinogen.	
Reproductive toxicity	No known significant effects or critical hazards	
Mutagenicity	No known significant effects or critical hazards	

#### 12. ECOLOGICAL INFORMATION

Product data	No data
Component data	No data
Mobility	No data
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional
Environmental effects	handling or disposal.

#### 13. DISPOSAL CONSIDERATIONS

Disposal methods	Dispose in accordance with all applicable federal state and local regulations.	
Waste from residues unused products	Dispose in accordance with all applicable federal state and local regulations.	
Contaminated packaging	Dispose in accordance with all applicable federal state and local regulations.	

# 14. TRANSPORT INFORMATION

IATA	Not regulated as dangerous goods.
IMDG/IMO	Not regulated as dangerous goods.
DOT	Not regulated as dangerous goods.

# 15. REGULATORY INFORMATION

Country	Inventory List	Status
Canada	Domestic Substances List (DSL)	Listed
Europe	European Inventory of Existing Commercial Chemical Substances (EINCES)	Listed
United States	Toxic Substances Control Act (TSCA) Inventory	Listed
Japan	ENCS	Listed
China	IECSD	Listed
Australia	AICS	Listed

SARA 311/312	Information	Status
	Chronic health hazard	None
	Acute health hazard	Irritant
	Fire hazard	None
	Sudden pressure	None
Section 302	Extremely hazardous material	None
CERCLA	Hazardous substance	None
Section 313	Toxic chemicals	Immediate health hazard

#### 16. OTHER INFORMATION

HMIS Hazard rating: Health = 2; Fire = 1; Reactivity = 0

Issuing date	November 21, 2016
Revision number	Release
Revision date	N/A

**DISCLAIMER:** The information presented herein is based on data considered to be accurate as of the date of the presentation of this Material Safety Data Sheet. However, MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.