

SAFETY DATA SHEET

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LCR LV,MV,HV,EHV PART A INJECTION EPOXY RESIN

Company: POLYGEM INC.
1105 CAROLINA DR.
WEST CHICAGO, IL 60185

Telephone: 630-231-5600
630-231-5604 (Fax Line)

Emergency Telephone Number: 1-800-535-505 USA
01-352-323-34 International

Section 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF SUBSTANCE OR MIXTURE:

Skin irritation: Category 2, H315
Skin Sensitization Category 1 H317
Eye irritation: Category 2, H319

GHS LABEL ELEMENTS:

HAZARD SYMBOLS:



SIGNAL WORD: Warning

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective

HAZARD STATEMENTS: H315 Causes skin irritation.

H315 Causes skin irritation

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:

RESPONSE: P261 Avoid breathing mist/vapors/spray

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

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

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

RESPONSE: P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical attention.

P337+P313 If eye irritation persists: Get medical attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

STORAGE: Not applicable.

DISPOSAL: P501 Dispose of contents and containers in accordance with local, regional and international regulations.

Precautionary statements are listed according to the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS) – Annex III

Section 2 - HAZARDS IDENTIFICATION CONTINUED

HMIS RATING:

CHEMICAL NAME	
HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	F

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Potential Health Effects

Eye contact: Mild or moderate irritation, possible minor temporary cornea injury.
Skin contact: May cause skin irritation on prolonged or repeated exposure.
Skin absorption: Not considered toxic.
Inhalation: May cause nasal irritation, central nervous system depression or lung injury.
Chronic effects of over exposure: None

OSHA GHS Classification

This product is classified as hazardous as defined within the GHS OSH Hazard Communication Standard 29CFR1910 1200

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Substances N/A

<u>Mixtures</u>	<u>CAS#</u>	<u>%</u>
Bisphenol A Epoxy Resin	25058-99-8	<75
Alkyl C12- C14 Glycidyl Ether	68609-97-2	>25

EINECS: 271-846-8
HAZARD CLASSIFICATION: [Xi] Irritant
RISK PHRASES: R38, R43

*ALL INGREDIENTS ARE REGISTERED ON TSCA.

*Unless otherwise noted, all PEL and TLV Values are reported as 8 hour time weighted averages (TWA)

Section 4 - FIRST AID MEASURES

Description of First Aid Measures

General advice: consult a physician; show this SDS to doctor in attendance.

In the event of skin contact: Drench the affected area immediately with plenty of water:

Remove contaminated clothing. Wash thoroughly with soap and water for at least 15 minutes

Seek medical attention if irritation, rash or other adverse effects occur.

In the event of eye contact: Bathe the eye with running water for at least 15 minutes, lifting the upper and lower eye lids. Get medical attention if symptoms persist.

In the event of exposure by inhalation: Move person to fresh air. Get medical attention if symptoms develop

Most important symptoms and effects both acute and delayed

Skin irritation, allergic reactions.

Indication of immediate medical attention and special treatment needed

No specific antidote; treat symptomatically

Eye wash stations and emergency showers should be available.

Section 5 - FIRE FIGHTING MEASURES

Recommended Extinguishing Media: Foam, carbon dioxide, dry chemicals or fog. Use water spray to cool fire exposed containers. **Do not use direct water stream which may spread fire.**

Special Fire Fighting Procedures: Firefighters should wear protective goggles and self contained breathing apparatus to avoid inhalation of smoke or vapors. Remove all ignition sources.

Unusual Fire or Explosion Hazards

Exposure to decomposition products may be harmful to health; combustion products may include but are not limited to: carbon monoxide, carbon dioxide, phenolics, aldehydes; smoke may contain particles of the original material as well. Prevent fire-fighting waters from entering sewer or waterways.

Advice for fire fighters: Use protective fire fighting clothing and positive pressure selfcontained breathing apparatus to protect against potential harmful and/or irritating fumes. Do not use high volume water jet as this may spread the area of the fire.

additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material; Have an eye wash station available.

Skin and Body Protection:

Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur.

Section 6: Accidental Release Measures

Special Protection:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred.

Steps to be taken in case of material is released or spilled:

Ventilate the area. Absorb spill with suitable absorbent material and place into a closed container. Prevent material from entering waterways. Wear protective equipment during cleanup. Use eye and skin protection.

Transport Emergency Phone Number:

(INFOTRAC) 1-800-535-5053

Section 7: Handling and Storage

Handling:

Harmful or irritation material. Avoid contact and avoid breathing the material. Use only in a well ventilated area.

Storage:

Store in a cool, dry place.

Respiratory Protection:

If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate NIOSH/MSHA approved self-contained breathing equipment or a full face respirator. Respirators should be selected by and used following requirements found in OSHA's respirator standards (29 CFR 1910134). Not required for properly ventilation area.

Ventilation:

Local exhaust and general ventilation is recommended.

Section 8: Exposure Control/Personal Protection (continued)

Hand Protection:

Nitrile Rubbers gloves.

Eye Protection:

Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material; Have an eye wash station available.

Skin and Body Protection:

Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur.

Section 9: Physical and Chemical Properties

Physical state: Gel
Color: White
Odor: Aromatic Odor
Weight by gallon: 15 lbs.
Solids (% by weight) 100
V.O.C. 0 g/L

Boiling range: 280 F
Melting point: N/A
Density: 1.2
Percent volatile: 0 by Weight
Vapor density (air=1): Heavier than air
Vapor pressure (mm Hg): N/A
Evaporation rate: N/A
Water miscibility: Limited

Section 10: Stability and Reactivity

Stability: Stable
Incompatibility: Strong Oxidizers, acids, bases and epoxy hardeners under controlled conditions.
Hazardous polymerization: Will not occur.
Hazardous decomposition products: Carbon Monoxide, Carbon Dioxide, smoke. Others Unknown.
Conditions to avoid: Heat and warm storage.

Section 11: Toxicological Information

Chemical Name LD50/LC50
Epoxy Resin Not established

Section 12: Ecological Information

Overview: No ecological information available.

Section 13: Disposal Considerations

To the best of our knowledge, this product does not meet the definition of hazardous waste under U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended. Consult state, local or provincial authorities for more restrictive requirements.

Section 14: Transport Information

Consult Bill of Lading for transportation information

DOT: Not Regulated
IATA: Not Regulated

Section 15: Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es): N/A

SARA Hazard Classification: SARA Title III Regulations (40 CFR 37 Acute)

SARA Section 313 Listed Ingredients: This material does not contain any substance which is subject to the reporting requirements of 40 CFR 372.

DOT Proper Shipping Name: n/a
UN Number: n/a

Section 16: Other Information

This information is furnished without warranty, representation inducement or license of any kind, except that is accurate to the best of Polygem Inc. knowledge, or obtained from sources believed by Polygem Inc. to be accurate and Polygem Inc. does not assure any legal responsibility for use reliance upon the same. Customers are encouraged to conduct their own tests. Before using any product, please read its label.

SAFETY DATA SHEET

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LCR INJECTION CARTRIDGE LV, MV, HV & EHV - PART B HARDENER

Company: POLYGEM INC.
PO Box 609
West Chicago, Illinois 60186

Telephone: 630-231-5600
630-231-5604 (Fax Line)

Emergency Telephone Number: 1-800-535-5053 USA
01-352-323-3444 International

Section 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to the Regulation (EC) No. 1272/2008

Acute Dermal Toxicity Category 4

Acute Oral Toxicity Category 4

Skin Sensitization Category 1

Skin Corrosion/Irritation Category 1B

Chronic Aquatic Toxicity Category 2

Classification according to the Regulation Directive 199/45/EC: [Xn] Harmful, [C] Corrosive, [N] Dangerous to the Environment

Information Concerning particular hazards for human and environment:

Product Description: This product is grey heavy paste with a sweet amine odor

Health Hazards: Corrosive, Severe eye irritant; Respiratory Irritant, may cause skin sensitization.

Flamability Hazards: This product is flammable above its flashpoint of 380F (195 C)

Reactivity Hazards: None known.

Environmental Hazards: The environmental effects of this product have not been investigated; however it is not expected to cause significant adverse effects.

Emergency Considerations: Emergency responders must wear proper personal protective equipment (and have appropriate fire suppression equipment) suitable for the situation to which they are responding.

Classification system:

This classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements

Labeling according to Regulation (EC) no. 1272/2008:

Hazard Pictograms:



GHS05



GHS07



GHS09

Signal Word: Danger

Hazard-determining component of labelling: Diethylenetriamine

Hazard Statements:

H302: Harmful if swallowed

H313: May be harmful in contact with skin

H317: May cause an allergic skin reaction

H335: May cause respiratory irritation

Precautionary Statements

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

Section 2 - HAZARDS IDENTIFICATION (continued)

P264: Wash hands 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.

Response Statements

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use appropriate media for extinction

P302+P353: IF ON SKIN: Wash with plenty of soap and water for extinction

P391: Collect spillage

P403+P235: Store in well ventilated place. Keep cool.

P501: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Hazard Description

This

HMIS-ratings (scale 0 - 4)

CHEMICAL NAME	
HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	F

2.3 Other Hazards

None Known

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200). Unlisted ingredients are not "hazardous" per the OSHA standard.

Section 3: Hazards Identifications

Chemical Name	CAS #	OSHA PEL*	ACGIH TLV*	WT%
Fatty Amidoamine Resin Mixture	T/S	N/E	N/E	<75
Modified Aliphatic Polyamine	T/S	N/E	N/E	>25

*ALL INGREDIENTS ARE REGISTERED ON TSCA.

*Unless otherwise noted, all PEL and TLV Values are reported as 8 hour time weighted averages (TWA)

*T/S - Trade Secret

Emergency Overview:

Mild or moderate eye irritation.
May cause skin irritation.
Harmful if swallowed.

HMIS RATING:

HEALTH-3, FLAMMABILITY-1, REACTIVITY-0
See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Potential Health Effects

Eye contact: Mild or moderate irritation, possible minor temporary cornea injury.
Skin contact: May cause skin irritation on prolonged or repeated exposure.
Skin absorption: Not considered toxic.
Inhalation: May cause nasal irritation, central nervous system depression or lung injury.
Chronic effects of over exposure: NONE

Section 4: First Aid Measures

EMERGENCY & FIRST AID PROCEDURES:

Eyes:	Flush with plenty of water and get medical attention. Keep eye lids apart. Wash within 1 minute of contact for maximum results.
Skin:	Promptly wipe clean with paper or cloths and wash with soap and water. Remove contaminated clothing before reuse. Attention should be paid to hair, nose and eyes.
Inhalation:	In case of exposure to high concentration of vapor or mist, remove person to fresh air.
Ingestion:	If large amounts are swallowed, induce vomiting. Seek medical attention. May cause burns to mouth and throat.
Primary routes of entry:	Inhalation, Ingestion, skin and eye contact.
Carcinogenicity:	This product does not contain 0.1% or more of any substance which is listed as a carcinogen by NTP, IARC or OSHA.

Section 5: Fire Fighting Measures

Flash Point:	234 F
Test Method:	Setaflash Closed Cup
Lower Flammability Limit:	N/A
Upper Flammable Limit:	N/A
Recommended Extinguishing Media:	Water, Foam, Carbon Dioxide, Dry Chemicals or Fog.
Special Fire Fighting Procedures:	Firefighters should wear protective goggles and self contained breathing apparatus to avoid inhalation of smoke or vapors. Remove all ignition sources.
Unusual Fire or Explosion Hazards (conditions to avoid):	May produce hazardous fumes or hazardous decomposition products, such as carbon dioxide, carbon monoxide, hydrogen sulfide, oxides of sulfur and nitrogen.

Section 6: Accidental Release Measures

Special Protection:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred.
Steps to be taken in case of material is released or spilled:	Ventilate the area. Absorb spill with suitable absorbent material and place into a closed container. Prevent material from entering waterways. Wear protective equipment during cleanup. Use eye and skin protection.

Transport Emergency Phone Number: (INFOTRAC) 1-800-535-5053

Section 7: Handling and Storage

Handling:	Harmful or irritation material. Avoid contact and avoid breathing the material Use only in a well ventilated area.
Storage:	Store in a cool, dry place.

Section 8: Exposure Control/Personal Protection

Respiratory Protection:	If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate NIOSH/MSHA approved self-contained breathing equipment or a full face respirator. Respirators should be selected by and used following requirements found in OSHA's respirator standards (29 CFR 1910134). Not required for properly ventilation area.
Ventilation:	Local exhaust and general ventilation is recommended.
Hand Protection:	Nitrile Rubbers gloves.
Eye Protection:	Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material; Have an eye wash station available.
Skin and Body Protection:	Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur.

Section 9: Physical and Chemical Properties

Physical state:	Gel
Color:	Gray
Odor:	Amine Odor
Weight by gallon:	14 lbs
Solids (% by weight)	100
V.O.C.	0 g/L
Boiling range:	335 F
Melting point:	N/E
Density:	1.04
Percent volatile:	N/D
Vapor density (air=1):	Not Volatile
Vapor pressure (mm Hg):	N/E
Evaporation rate:	N/A
Water miscibility:	<0.1%

Section 10: Stability and Reactivity

Stability:	Stable
Incompatibility:	Strong oxiders, epoxy resin, and amine mixtures especially when hot.
Hazardous polymerization:	Will not occur.
Hazardous decomposition products:	Oxides of Carbon and Phenolics under burning conditions
Conditions to avoid:	Heat and warm storage

Section 11: Toxicological Information

<u>Chemical Name</u>	<u>LD50/LC50</u>
Modified Aliphatic Polyamine	Not established

Section 12: Ecological Information

Overview:	No ecological information available.
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Section 13: Disposal Considerations

To the best of our knowledge, this product does not meet the definition of hazardous waste under U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended. Consult state, local or provincial authorities for more restrictive requirements.

Section 14: Transport Information

Consult Bill of Lading for transportation information

DOT Shipping Name: Corrosive Liquid N.O.S. (Amidoamine Resin Mixture)

DOT UN Number: UN1760

DOT Hazard Class: 8

DOT Packing Group: III

DOT Exemption: Not applicable.

IATA Shipping Name: Corrosive Liquid N.O.S. (Amidoamine Resin Mixture)

IATA UN Number: UN1760

IATA Hazard Class: 8

IATA Packing Group: III

Consult Bill of Lading for transportation information

IMDG UN Number : UN1760

IMDG Shipping Name: Corrosive Liquid N.O.S. (Amidoamine Resin Mixture)

Section 15: Regulatory Information

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es): N/A

SARA Hazard Classification: SARA Title III Regulations (40 CFR 370): N/A

SARA Section 313 Listed Ingredients: This material does not contain any substance which is subject to the reporting requirements of 40 CFR 372.

DOT Proper Shipping Name: Corrosive Liquid N.O.S. (Amidoamine Resin Mixture)

UN Number: UN1760

Section 16: Other Information

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