May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

Hazard Pictograms:

AR MVB- EPOXY - PART A

SECTION I: IDENTIFICATION

PPI Tech, Inc. Emergency Telephone Number: 1-800-535-5053
2700 west Cumberland street building #5 Telephone Number for Information: 706-253-5055

Lebanon PA 17042

Product Name: AR - MVB - Part A

Product Use: Epoxy Resin

SECTION II: HAZARD IDENTIFICATION

Signal Word: WARNING

Hazard Classification:

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. I H317 May cause an allergic skin reaction.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

Hazard Statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements:

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

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection

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 advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

SECTION III: HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

- 3.2 Chemical characterisation: Mixtures
- · Description:

Epoxy resin formulation with a bisphenol-A liquid resin base and bisphenol-F liquid resin

	Dangerous components:					
	CAS: 1675-54-3 EINECS: 216-823-5 Index number: 603-073-00-2		bis[4-(2,3-epoxypropoxy)phenyl]propane	50-100%		
			Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit.	1		
			2, H319; Skin Sens. 1, H317			
	Reg.nr.: 01-2119456619	9-26-xxxx				
	CAS: 9	003-36-5	Bisphenol F- Epoxyresin	10-25%		
			Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin			
	Reg.nr.: 01-2119454392	2-40-xxxx	Sens. 1, H317			
	CAS: 68609-97-2		oxirane, mono[(C12-14-alkyloxy)methyl] derivs	10-25%		
	EINECS: 271-846-8 Index number: 603-103-00-4		Skin Irrit. 2, H315; Skin Sens. 1, H317			
	Reg.nr.: 01-2119485289	9-22-xxxx				
1	Additional information For the wording of the listed beyond phrases refer to section 16					

Additional information For the wording of the listed hazard phrases refer to section 16.

May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

SECTION IV – FIRST AID MEASURES

- · General information Instantly remove any clothing soiled by the product.
- · After inhalation

Take affected persons into the open air and position comfortably Seek medical treatment in case of complaints.

· After skin contact

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.
- · After swallowing Seek immediate medical advice.
- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

- · Information for doctor No particular measures are known treat according to symptoms.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

- 5.1 Extinguishing media
- · Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

- · For safety reasons unsuitable extinguishing agents Water with a full water jet.
- · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 5.3 Advice for firefighters
- · Protective equipment: Put on breathing apparatus.

SECTION VI – ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · 6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections Clean the accident area carefully.

May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND STORAGE

· 7.1 Precautions for safe handling

The usual precautionary measures for handling chemicals must be observed. Ensure good ventilation/exhaustion at the workplace.

- · Information about protection against explosions and fires: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and containers:

Store only in the original container.

Keep containers securely closed and dry, store frost-free.

Provide floor trough without outlet.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION VIII – EXPOSURE CONTROL MEASURES

Exposure Limits: NE

Appropriate Engineering Controls: Good General ventilation.

Personal Protective Equipment:







Hand: Nitrile rubber, NBR Fluorocarbon rubber (Viton)

PVC gloves

Eye: Tightly Sealed Safety Glasses

Skin and Body: Protective Work Clothing **Respiratory:** Combination filter A-P2

Additional Information: None.

May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

SECTION IX – PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance Form: Light yellowish liquid

Odor: Mild Epoxy

pH-value: NA
Boiling Point/Boiling Range: 200 °C
Freezing Point: NA
Flash Point: 150 °C
Vapor Pressure: NA
Vapor Density: NA

Viscosity: 950mPas (ISO3219)

Solubility: Not miscible or difficult to mix

Specific Gravity NA

SECTION X – REACTIVITY DATA

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Reacts with strong oxidizing agents, alkali, amines and acids

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: strong oxidizing agents

10.6 Hazardous decomposition products: none, if stored and handled correctly.

In the event of fire: toxic gases and vapours

SECTION XI – TOXICOLOGICAL INFORMATION

· 11.1 Information on toxicological effects

· Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC5	· LD/LC50 values that are relevant for classification:				
1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane					
Oral	LD50	15,000 mg/kg (rat)			
Dermal	LD50	23,000 mg/kg (rab)			
9003-36-5 Bisphenol F- Epoxyresin					
Oral	LD50	>2,000 mg/kg (rat)			
Dermal	LD50	>2,000 mg/kg (rat)			
68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs					
Oral	LD50	>5,000 mg/kg (rat)			
Dermal	LD50	>4,500 mg/kg (rab)			

May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

SECTION XII - ECOLOGICAL INFORMATION

Aquatic toxicity: Not determined. Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Persistence and Degradability: No further relevant information available.

Behavior in Environmental Systems: No further relevant information available

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil: Danger to drinking water if even small quantities leak into soil.

Other Adverse Effects: Water hazard class 2 (German Regulation) (Self-assessment): hazardous for

water. Do not allow product to reach ground water, water bodies or sewage system.

SECTION XIII - DISPOSAL CONSIDERATIONS

Recommendation: For disposal, local regulations issued by the authorities must be observed. Dispose of liquid components at a suitable incineration plant. After curing, the product can be disposed of with household waste.

SECTION XIV - TRANSPORT INFORMATION

UN-Number: 3082

UN Proper Shipping Name: 3082 Environmentally hazardous substance, liquid, N.O.S (epoxy resin)

Transport Hazard Class: 9
Packing Group:

Environmental Hazards: Marine Pollutant

Additional Information: Limited Quantity - 5L

Special Precautions for User:



SECTION XV - OTHER REGULATORY INFORMATION

NFPA Ratings (Scale 0-4)





SECTION XVI - OTHER INFORMATION

Last Updated: 6/1/2019

NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products. End of SDS.

May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

AR-MVB - EPOXY - PART B

SECTION I: IDENTIFICATION

PPI Tech, Inc. Emerge 2700 West Cumberland street Building #5 Telepho

Lebanon PA 17042

Product Name: **EZ-100** - MVB - Part B Product Use: Epoxy Curing Agent

Emergency Telephone Number: I-800-535-5053 Telephone Number for Information: 706-253-5055

SECTION II: HAZARD IDENTIFICATION

Signal Word: DANGER Hazard Classification:

Acute Toxicty, Oral, Catagory 4 Serious Eye Damage, Category I Skin Corrosion, Catagory I B Skin Sensitization, Catagory I

Repr.2 Suspected of damaging fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure

Hazard Statements:

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H361- Suspected of damaging fertility or the unborn child

H372- Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements:

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

P352 – Wash with plenty of water/...

P270 – Do no eat, drink or smoke when 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.

P3 12 - Call a POISON CENTER/doctor/...if you feel unwell.

P301 +P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing Rinse skin with water/shower.

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfor table 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.

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

P308+P311- If exposed or concerned: Call a POISON CENTER/doctor/...

P322 _ Specific measure (see...on this label)

P363 – Wash contaminated clothing before reuse.

P403+P233 - Store in well ventilate place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant.





May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:	CAS No.	Percentage %
Phenol, styrenated	61788-44-1	25-50%
Polyoxpropylenediamine	9046-10-0	25-50%
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	25-50%
2-piperazin- l ylethylamine	140-31-8	2.5-10%
2,4,6-tris (dimethylaminomethyl)phenol	90-72-2	2.5-10%

SECTION IV - FIRST AID MEASURES

EYES: Flush eyes immediately with plenty water thoroughly for at least 15 minutes, lifting both eyelids. Get Medical HELP.

SKIN: Immediately flush with water for at least 15 minuteS. Remove contaminated clothing and footwear while flushing skin with water. Launder clothing and dispose of footwear. Seek medical attention.

INGESTION: Do Not Induce Vomiting. Rinse mouth with water. Call a physician or poison control center immediately.

INHALATION: Get immediated medical attention. Take precautions to ensure your own safety. Remove fom area of exposure. If unconcious, give oxygen. Give artificial respiration if not breathing. Avoid mouth to mouth contact by using a barrier device. If the heart has stopped start cardiopulmonary resuscitation (CPR)

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

No further relevant information available.

SECTION V - FIRE FIGHTING MEASUREHTING MEASURES

General Hazard: Thermal decomposition can lead to release of irritating gases and vapors Suitable Extinguishing Media: Alcolhol resistant foam, water spray, CO_2 , dry powder Unsuitable Extinguishing Media: Water jet.

Special Remarks and Advice for Firefighters: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

SECTION VI – ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb with non-combustible liquid binding material (sand, diatomaceous earth (clay), acid binders, universal binders.

LARGE SPILL: Wear appropriate personal protective equipment. Contain spill and pump into suitable disposal container.

ENVIRONMENTAL PRECAUTIONS:

WATER SPILL: Do not allow to enter drains or waterways. LAND SPILL: Should not be released into the environment.

GENERAL PROCEDURES: Ensure adequate ventilation. Ensure air handling systems are operational. All cleanup materials should be removed and placed in appropriate containers, labeled and stored in a safe place prior to proper treatment or disposal

SECTION VII - HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid releases to the environment.

Handling: Use with adequate ventilation. Use personal protective equipment. **Storage:** Store in a well-ventilated area. mage. Store in original container. **Storage Temperature:** Normal temperature and conditions of warehousing.

SECTION VIII – EXPOSURE CONTROL MEASURES

Engineering Controls:
Personal Protective Equipment:







SKIN: Protective Gloves

EYE: Wear chemical splash goggles and face shield

RESPIRATORY: A NIOSH/MSHA approved air supplied respirator is advised in

absence of environmental control.

PROTECTIVE CLOTHING: Permeation resistant clothing and foot protection

WORK HYGIENIC PRACTICES: Employees should wash their hands and face before

eating, drinking or using tobacco products.

OTHER PRECAUTIONS: Properly maintain a safety shower and eyewash facility in the work area

May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

SECTION IX – PHYSICAL/CHEMICAL CHARACTERISTICS

Fluid Physical State: Color: Yellowish Odor: Ammonia-like pH-value: >No data available Boiling Point/Boiling Range: >200°C (392°F) Freezing Point: No data available Flash Point And Method: $>100^{\circ}C (212^{\circ}F)$ Flammable Limits 1.3% to 13%

Auto Igniting: Product is not self-igniting.

Vapor Pressure:No data availableVapor Density:No data availableViscosity:No data availableSolubility in water:Fully MiscibleEvaporation Rate:No data availableFlammability:Non-FlammableThermal Decomposition:No data available

SECTION X – REACTIVITY DATA

Conditions to be avoided: None known

Incompatible materials: Strong oxidizers, Alkalis, Peroxides and other radical forming substances **Hazardous Decomposition Products:** Combustion may produce oxides of carbon and nitrogen.

Reactivity: Stable under recommended storage conditions. **Stability:** Stable under normal conditions of use and storage.

Possibility of Hazardous Reactions: None known. Hazard Polymerization: None under normal processing

SECTION XI – TOXICOLOGICAL INFORMATION

Acute toxicity: Oral: Benzyl Alcohol: LD50 - Rat 1230 mg.kg

Likely Route of Exposure: Skin. Exposure Symptoms:

Eyes: Severe irritation, burns and blindness.

Skin: Harmful, causes skin burns.

Inhalation: Harmful. May cause delayed lung injury.

Ingestion: Severe mouth, throat, stomach and esophagus burns.

Effects (Short-term, Long-term):

Immediate: Skin and eye contact.

Delayed: Ingestion. **Chronic:** NE

CITIOTIC. INL

Carcinogenicity: No.

Sensitization: May cause skin sensitization.

May be used to comply with OSHA's Hazard Communication Standard (HCS), 29 CFR 1910, 1200. Standard must be consulted for specific requirements.

SECTION XII - ECOLOGICAL INFORMATION

Aquatic toxicity:Cyclohexanemeth anamine, 5-amino-1,3,3-trimethyl- Aquatic invertebrates, LC50-Daphnia magna (water flea) 17.4 mg/L

Persistence and Degradability: No further relevant information available.

Behavior in Environmental Systems: No further relevant information available.

Bioaccumulative Potential: No further relevant information available.

SECTION XIII - DISPOSAL CONSIDERATIONS

Recommendation: Dispose of according to local, state and federal regulations.

Additional Information: Refer to Section 8

SECTION XIV – TRANSPORT INFORMATION

UN-Number: 2735

UN Proper Shipping Name: Amines, Liquid, Corrosive, N.O.S.* (Isophorone Diamine)

Transport Hazard Class: 8
Packing Group: ||





Limited Quantity: 5L

SECTION XV - OTHER REGULATORY INFORMATION

NFPA Ratings (Scale 0-4)





SECTION XVI - OTHER INFORMATION

Last Updated: 6/1/2019

NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products. End of SDS.