EPOXY.COM #304 MATERIAL SAFETY DATA SHEET

I. PRODUCT AND COMPANY IDENTIFI Company:	CATION Epoxy Systems, Inc.
Address:	304774 West Pennsylvania Ave. Dunnellon, FL 34431
Product Name:	A Component: EPOXY.COM #304
Product Description:	Low Viscosity High-Strength Epoxy Resin
Emergency Contact No.:	1-800-633-8253PERS
Date Prepared or Revised:	February 30413

II. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Names	CAS Numbers
BisPhenolA/Epichlorohydrin (Epoxy Resin)	25068-38-6
N-butyl glycidyl ether	2426-08-06
Cresyl Glycidyl Ether	2210-79-9

The remaining ingredients are designated as "trade secret".

III. <u>HAZARD IDENTIFICATION</u>	
EMERGENCY OVERVIEW	
Non-corrosive.	
May cause eye and skin irritatio	n.
May cause skin sensitization.	
POTENTIAL HEALTH EFFEC	TS
ACUTE	
Eye Contact:	May cause eye irritation, swelling, tearing, redness or cornea damage.
Skin Contact:	Moderate irritation. May cause skin sensitization, evidenced by rashes and hives.
Inhalation:	Moderate irritation to the nose and respiratory tract. May cause Central Nervous System
	depression, evidenced by headache, dizziness, and nausea.
Ingestion:	May cause irritation to the gastrointestinal tract. May cause Central Nervous System
8	depression or other systemic effects.
Systemic Effects:	Lungs, eyes, and skin.
IV. FIRST AID MEASURES	
Eve Confact.	Immediately flush eyes with plenty of cool water for at least 15 minutes while holding
Eye Contact:	Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. If redness, burring, blurred vision, or swalling persists, CONSULT
Eye Contact:	the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A
	the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN.
Eye Contact: Skin Contact:	the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN . Remove product and immediately wash affected area with soap and water. Do not
	the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN . Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with
	the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN . Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, CONSULT A
Skin Contact:	the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN . Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, CONSULT A PHYSICIAN .
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Skin Contact:	 the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN. Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, CONSULT A PHYSICIAN. DO NOT INDUCE VOMITING. Never administer anything by mouth to an unconscious person. Rinse out mouth with water, then drink sips of water to remove
Skin Contact:	 the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN. Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, CONSULT A PHYSICIAN. DO NOT INDUCE VOMITING. Never administer anything by mouth to an unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. CONSULT A PHYSICIAN if vomiting occurs spontaneously, keep
Skin Contact: Ingestion:	 the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN. Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, CONSULT A PHYSICIAN. DO NOT INDUCE VOMITING. Never administer anything by mouth to an unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. CONSULT A PHYSICIAN if vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Skin Contact:	 the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A PHYSICIAN. Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. If redness, burning, or swelling persists, CONSULT A PHYSICIAN. DO NOT INDUCE VOMITING. Never administer anything by mouth to an unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. CONSULT A PHYSICIAN if vomiting occurs spontaneously, keep

EPOXY.COM #304 MATERIAL SAFETY DATA SHEET V. FIRE-FIGHTING MEASURES **Suitable Extinguishing Media:** Water fog, carbon dioxide or dry chemical, aqueous foam. **Fire And Explosion Hazard:** Hazardous decomposition products may occur when materials polymerize at temperatures above 500°F. Do not allow run-off from fire fighting to enter drains or water courses. **Fire Fighting Equipment and** Wear full protective clothing and self-contained breathing apparatus for fire fighting. **Procedures:** Isolate fuel supply from fire. Clear fire area of all non-emergency personnel. Use water spray to cool fire-exposed surfaces and containers. VI. ACCIDENTAL RELEASE MEASURES **Personal Precautions:** Use cautious judgment when cleaning up spill. Shut off leaks, if possible without personal risk. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas. **Environmental Precautions:** Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils. **Small spills**: Soak up with absorbent material such as clay, sand or other suitable non-**Clean-up Methods:** reactive material. Place in leak-proof containers. Seal tightly for proper disposal. Large spills: Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal. **Additional Information:** Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations. VII. STORAGE AND HANDLING **Storage:** Keep away from: acids, oxidizers, heat, or flames. Keep in cool, dry, well-ventilated area in closed containers. Protect containers from physical damage. Handling: To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a wellventilated work area. VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION **Protective Measure:** Wear appropriate personal protective equipment. **Eye Protection:** Avoid contact with eyes. Wear chemical splash goggles or safety glasses with side shield. Hand Protection: Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl. **Skin and Body Protection:** Wear chemical-resistant gloves and other clothing as required to minimize contact. Not required for properly ventilated areas. **Respirator Protection: Exposure Limits:** COMPONENT ACGIH **OSHA** (TLV) (PEL) N/E BisPhenolA/Epichlorohydrin (Epoxy Resin) N/E N-butyl glycidyl ether 25 ppm 25 ppm IX. PHYSICAL AND CHEMICAL PROPERTIES Form: **Freezing Point:** Paste N/E Color: **Flash Point:** >250°F (Open Cup) Clear Yellowish **Odor: Specific Gravity:** 1.13 @ 75°F Sweet Solubility In Water: Insoluble Vapor Pressure: Not Volatile **Boiling Point:** >500°F (>260°C) X. **REACTIVITY DATA**

Stability:Stable under normal storage conditions.Conditions To Avoid:Incompatible chemicals, high heat and open flame.Materials To Avoid:Oxidizing agents, acids, organic bases, and amines.Hazardous Decomposition Products:Combustion may produce carbon monoxide, carbon dioxide, aldehydes, acids
and other organic substances.Hazardous Polymerization:Will not occur.

		MATERIAL SAFETY DATA SHEET
XI. <u>T</u>	OXICOLOGICAL PROPERTIES	
	Acute Oral (LD ₅₀ , Rat): Acute Dermal (LD ₅₀ , Rabbit): Acute Inhalation (LC ₅₀ , Rat): Chronic Health Hazard:	Non toxic N/E N/E The Diglycidyl Ether of Bisphenol A has shown weak carcinogenicity in 2-year mice bioassays. This material has shown activity in-vitro microbial mutagenicity screening and has produced chromosomal aberrations in cultured rat liver cells. No activity when tested by vivo mutagenicity assays.
	DISPOSAL CONSIDERATIONS Waste From Residues / Unused Products:	This material is not a hazardous waste by RCRA criteria (40 CFR 261). Dispose of container and unused contents in accordance with federal, state, and local requirements.
	TRANSPORTATION	
	DOT:	Not Regulated For Transport
	ICAO/IATA: Basis Shinning Basuinementar	
	Basic Shipping Requirements: UN Number:	UN3082
	Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, n.o.s. (Bisphenol-A Epichlorohydrin
	Troper Simpping Tume.	resin)
	Hazard Class:	9
	Packing Group:	III
	IMO:	
	Basic Shipping Requirements: UN Number: Proper Shipping Name:	UN3082 Environmentally Hazardous Substance, Liquid, n.o.s. (Bisphenol-A Epichlorohydrin resin), Marine Pollutant
	Hazard Class: Packing Group:	9 III

EPOXY.COM #304

XIV. REGULATORY INFORMATION

Country	Regulatory List
USA	TSCA

EPA SARA Title III Section 312 (40 CFR 370) Hazardous Classification: Acute/Chronic Health Hazard.

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level: None.

US. California "Safe Drinking Water and Toxic Enforcement Act" (Proposition 65): This product contains small traces of the following chemicals that are known to the State of California to cause cancer and/or reproductive toxicity and other har

Component	Regulation	Concentration	Remarks
Phenylglycidyl ether*	ACGIH	Trace	Carcinogenic
Epichlorohydrin*	ACGIH	Trace	Carcinogenic

* May be absorbed through skin.

XV. OTHER INFORMATION

ł	IMIS RATING		
	Health	Flammability	Physical Hazard
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		1' 1 1	

N/E – Not Established

This Material Safety Data Sheet (MSDS) is prepared by Epoxy Systems, Inc. in compliance with the requirements of OSHA 29 CFR Part 1910.13040. The information it contains is offered in good faith as accurate as of the date of this MSDS. This MSDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

I. PRODUCT AND COMPANY IDENTIFICATION

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Address:	304774 West Pennsylvania Ave. Dunnellon, FL 34431
Product Name:	B Component: EPOXY.COM #304
Product Description:	Low Viscosity High-Strength Epoxy Resin
Emergency Contact No.:	1-800-633-8253 PERS
Date Prepared or Revised:	February 30413

II. <u>COMPOSITION / INFORMATION ON INGREDIENTS</u>

Chemical Names	CAS Numbers
Phenol (Benzenol)	108-95-2
Isophorone Diamine	002855-13-2

The remaining ingredients are designated as "trade secret".

III. <u>HAZARD IDENTIFICATION</u> EMERGENCY OVERVIEW

EMERGENCY OVERVIEW	
Corrosive.	
Severe irritation to eyes and skin	
May cause skin sensitization.	
Components of the product may	affect the nervous system.
POTENTIAL HEALTH EFFECTS	5
ACUTE	
Eye Contact:	Severe irritation, swelling, tearing, redness or cornea damage. May cause burns and
	tissue damage.
Skin Contact:	Severe irritation. May cause burns and tissue damage. May cause skin sensitization
	evidenced by rashes and hives.
Inhalation:	Moderate irritation to the nose and respiratory tract. May cause Central Nervous System
	depression, evidenced by giddiness, headache, dizziness, and nausea.
Ingestion:	May cause irritation to the gastrointestinal tract. May cause headache nausea. May cause
	Central Nervous System depression or other systemic effects.
Systemic Effects:	Lungs, eyes, and skin.

IV. FIRST AID MEASURES

s open. If redness, burning, blurred vision, or swelling persists, CONSULT A ICIAN.
re product and immediately wash affected area with soap and water. Do not
reases or ointments. Remove contaminated clothing. Wash clothing with
nd water before reuse. If redness, burning, or swelling persists, CONSULT A
ICIAN.
DT INDUCE VOMITING. Never administer anything by mouth to an
cious person. Rinse out mouth with water, then drink sips of water to remove
om mouth. CONSULT A PHYSICIAN if vomiting occurs spontaneously, keep
elow hips to prevent aspiration.
e patient to fresh air. If patient continues to experience difficulty breathing,

EPOXY.COM #304 MATERIAL SAFETY DATA SHEET

Water spray, fog or foam, carbon dioxide, dry chemical, limestone powder. Irritating and toxic fumes may be produced at high temperature. In a fire, may produce carbon monoxide, toxic nitrogen oxide, ammonia, and carbon dioxide. Use of water may result in the formation of very toxic aqueous solution. Do not allow run-off from fire fighting to enter drains or water courses. Wear full protective clothing and self-contained breathing apparatus for fire fighting. Isolate fuel supply from fire. Clear fire area of all non-emergency personnel.			
RES			
Use cautious judgment when cleaning up spill. Shut off leaks, if possible without personal risk. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.			
Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils			
 Small spills: Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal. Large spills: Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal. Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations. 			
in closed containers. Protect containers from physical damage. To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well ventilated work area.			
ONAL P	PROTECTION		
		protective equipment.	
			oggles or safety glasses with side
	e		g as required to minimize contact.
Not rec	juired for properly v	entilated areas.	
	АССІН	OSHA	
		5 ppm	
	10 ppm	10 ppm	
Liauid		Freezing Point:	N/E
Dark A	mber	Vapor Pressure:	N/E
Dark A Ammo		Vapor Pressure: Flash Point:	N/E 262°F (128°C)
	Irritatir carbon result if fighting Wear ff Isolate Isolate Use can persona Evacua Constru and soi Small s reactive Large contain non-rea Notify likely t Keep a in close To prev approp smoke. ventilat ONAL H Wear a Avoid s shield. Wear c	Irritating and toxic fumes m carbon monoxide, toxic nith result in the formation of ve- fighting to enter drains or w Wear full protective clothin Isolate fuel supply from fire RES Use cautious judgment whe personal risk. Wear suitabl Evacuate personnel to safe Construct a dike to prevent and soils. Small spills : Soak up with reactive material. Place in 1 Large spills : Approach sus contain material. Soak up w non-reactive material. Place Notify authorities if any exp likely to occur. Dispose in Keep away from: acids, oxi in closed containers. Prote To prevent skin and eye cor appropriate protective cloth smoke. Wash thoroughly a ventilated work area. ONAL PROTECTION Wear appropriate personal p Avoid contact with eyes. W shield. Wear chemical-resistant glo Wear chemical-resistant glo Not required for properly version 10 ppm 10 ppm	Irritating and toxic fumes may be produced at hig carbon monoxide, toxic nitrogen oxide, ammonia, result in the formation of very toxic aqueous solut fighting to enter drains or water courses. Wear full protective clothing and self-contained be Isolate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply from fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Clear fire area of all solate fuel supply form fire. Solate supply form fire. The gradient super fuel supply form fire. The gradient super fuel supply form fire. The fuel supply form fire. Solate sup form: acids, oxidizer

EPOXY.COM #304 MATERIAL SAFETY DATA SHEET

X. <u>REACTIVITY DATA</u> Stability: Conditions To Avoid: Materials To Avoid: Hazardous Decomposition	Stable under normal storage conditions. Incompatible chemicals, high heat, and open flame. Oxidizing agents and acids. Combustion may produce carbon monoxide, carbon dioxide, and nitrogen oxide, and		
Products: Hazardous Polymerization:	other organic substances. Will not occur.		
·			
XI. TOXICOLOGICAL PROPERTIES			
Acute Oral (LD ₅₀ , Rat):	Non Toxic		
Acute Dermal (LD ₅₀ , Rabbit):	Non Toxic		
Acute Inhalation (LC ₅₀ , Rat): Chronic Health Hazard:	N/E Components of this product are not listed as carcinogens in concentrations of 0.1% or greater. Repeated or prolonged exposure may cause allergic reaction and/or limited sensitization.		
XII. DISPOSAL CONSIDERATIONS			
Waste From Residues / Unused Products:	Dispose of container and unused contents in accordance with federal, state, and local requirements.		
Unuseu l'Iouucis.	requirements.		
XIII. TRANSPORTATION			
US DOT: Cartridges:	Consumer Commodity, ORM-D		
Single Packaging:	UN1960, Amines, Liquid, Corrosive, n.o.s. (Isophorone Diamine), 8, II		
IATA:	UN1960, Amines, Liquid, Corrosive, n.o.s. (Isophorone Diamine), 8, II		
IMO:	UN1960, Amines, Liquid, Corrosive, n.o.s. (Isophorone Diamine), 8, II		
XIV. REGULATORY INFORMATION			
Country Regulatory I			
USA TSCA			
EPA SARA Title III Section 312 (40 CFR 370) Hazardous Classification:			
Acute/Chronic Health Hazard.			
EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level:			
Phenol.			
	ter and Toxic Enforcement Act" (Proposition 65): This product contains small traces of wn to the State of California to cause cancer and/or reproductive toxicity and other harm.		

XV. OTHER INFORMATION				
HMIS RATING				
	Health	Flammability	Physical Hazard	
	3	1	0	

N/E – Not Established

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