# 630 Clear & Conductive 100% Solids Epoxy Novolac Hardeners Part B







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# 1. Product and Company Identification

630-COND-B **Product Code:** 

**Product Name: Trade** 630 Clear & Conductive 100% Solids Epoxy Novolac Hardeners Part B Name: Manufacturer 630 Clear & Conductive 100% Solids Epoxy Novolac Hardeners Part B

Information

**Company Name:** Epoxy Systems, Inc.

> 20774 W Pennsylvania Ave Dunnellon, Florida 34431

+1 (352) 489-1666 **Phone Number:** 

**PERS Emergency Contact:** (800)424-9300

+1 (801) 629-0667 **Alternate Emergency Contact:** (International)

**Intended Use:** Industrial floor coatings.

# 2. Hazards Identification

GHS Classification	Placard	Key word	GHS hazard phrase			
Skin Sensitization, Category 1B	Exclamation	Warning	May cause an allergic skin reaction			
	point					
Skin Corrosion/Irritation, Category 1A	Corrosive	Danger	Causes severe skin burns and eye damage			
Serious Eye Damage/Eye Irritation, Category 1	Corrosive	Danger	Causes serious eye damage			
Acute Toxicity: Oral, Category 4	Exclamation	Warning	Harmful if swallowed			
	point					
Acute Toxicity: Inhalation, Category 4	Exclamation	Warning	Harmful if inhaled			
	point					
Acute Toxicity: Skin, Category 4	Exclamation	Warning	Harmful in contact with skin			
	point					

## **GHS Hazard Phrases**

H317 - May cause an allergic skin reaction.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

H302 - Harmful if swallowed.

H332 - Harmful if inhaled.

## **GHS Precaution Phrases**

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

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

P362+364 - Take off contaminated clothing and wash it before reuse.

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

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

P281 - Use personal protective equipment as required.

# **GHS Response Phrases**

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P333+313 - If skin irritation or rash occurs, seek medical advice/attention.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P311 - Call a POISON CENTER

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P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P314 - Get medical attention/advice if you feel unwell.

# **GHS Storage and Disposal Phrases**

P501 - Dispose of contents/container to local, state, and federal authority requirements.

# **Potential Health Effects (Acute and Chronic)**

Corrosive to eyes and skin. Causes burns. May be harmful if swallowed. Irritating to respiratory system. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling. Aspiration hazard if swallowed. Can enter lungs and cause damage.

### **Inhalation**

Corrosive to respiratory tract. May cause respiratory sensitization.

## **Skin Contact**

Contact with substance may cause severe burns to skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

# **Eye Contact**

Corrosive/irritation to eyes. Causes eye burns.

# Ingestion

Harmful if swallowed. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

## **Recommended Exposure Limits**

Not established.

# **Medical Conditions Generally Aggravated By Exposure**

Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

# **OSHA Regulatory Status:**

This material is classified as hazardous under OSHA regulations.

# 3. Composition/Information on Ingredients Hazardous Components (Chemical Name) CAS # Concentration

на	zardous Components (Chemical Name)	CAS#	Concentrati
1.	Isophoronediamine	2855-13-2	70 - 85 %
2.	1,5-Pentanediamine, 2-methyl-	15520-10-2	1.0 - 15 %
3.	Phenol, 4-nonyl-, branched	84852-15-3	5.0 - 20 %

# 4. First Aid Measures

# **Emergency and First Aid Procedures**

## In Case of Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If experiencing respiratory symptoms: Get medical attention immediately.

# In Case of Skin Contact

In case of contact, immediately wash skin with soap and copious amounts of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.

# In Case of Eye Contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention immediately.

## In Case of Ingestion

If swallowed, wash out mouth with water provided person is conscious. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Get medical attention immediately.

# **Signs and Symptoms Of Exposure**

Moderate irritation effect.

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# 5. Fire Fighting Measures

Flash Pt: ~ 200.00 F Method Used: Pensky-Marten Closed Cup

**Explosive Limits:** LEL: NE UEL: NE

**Autoignition Pt:** No data available.

# **Fire Fighting Instructions**

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

# **Flammable Properties and Hazards**

Combustible material: may burn but does not ignite readily.

## **Hazardous Combustion Products**

In a fire, product may produce the following: Carbon monoxide, Carbon dioxide, Fire may produce irritating, corrosive and/or toxic gases.

# **Suitable Extinguishing Media**

Dry chemical, CO2, water spray or regular foam.

# **Unsuitable Extinguishing Media**

Do not use a direct water stream, which may spread fire.

# 6. Accidental Release Measures

# Steps To Be Taken In Case Material Is Released Or Spilled

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.

Absorb with sand or vermiculite and place in closed containers for disposal. Ventilate the area.

# **Protective Precautions, Protective Equipment and Emergency Procedures**

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Where splashing is possible, full chemically resistant protective clothing, and boots are required.

# **Environmental Precautions**

Prevent entry into waterways, sewers, basements or confined areas.

# 7. Handling and Storage

### **Hazard Label Information:**

Avoid contact with eyes. Do not get on skin and clothing. Avoid inhalation of vapor or mist. Store in a closed container.

## **Precautions To Be Taken in Handling**

Provide adequate ventilation. Wear all personal protection required in section 8.

## **Precautions To Be Taken in Storing**

Keep container tightly closed in a dry and well-ventilated place.

# **Other Precautions**

Wash thoroughly after handling.

# 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TLV	Other Limits
1. Isophoronediamine	2855-13-2	No data.	No data.	No data.
2. 1,5-Pentanediamine, 2-methyl-	15520-10-2	No data.	No data.	No data.
3. Phenol, 4-nonyl-, branched	84852-15-3	No data.	No data.	No data.

## **Protective Equipment Summary - Hazard Label Information:**

Impervious clothing. Neoprene gloves Safety glasses, or goggles. Chemical resistant boots

# **Respiratory Equipment (Specify Type)**

Normally when good engineering controls are used, no respiratory protection is needed. However, if cured product is abraded by sanding or grinding use a NIOSH approved air-purifying respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible

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under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

# **Eye Protection**

Safety glasses, or goggles.

## **Protective Gloves**

Nitrile rubber and Neoprene are recommended.

# **Other Protective Clothing**

Where splashing is possible, full chemically resistant protective clothing, safety glasses or face shield and boots are required.

# **Engineering Controls (Ventilation etc.)**

Good general ventilation should be sufficient to control airborne levels. Safety shower and eye bath.

# Work/Hygienic/Maintenance Practices

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

# **Environmental Exposure Controls**

Avoid runoff into storm sewers and ditches which lead to waterways.

9. Physical and Chemical Properties						
Physical States:	[ ] Gas [ X ] Liquid [ ] Solid					
Melting Point:	NE					
Boiling Point:	NE					
Decomposition Temperature:	NE					
Autoignition Pt:	No data.					
Flash Pt:	~ 200.00 F Method Used: Pensky-Marten Closed Cup					
Explosive Limits:	LEL: NE UEL: NE					
Specific Gravity (Water = 1):	~ .9964 - 1.000					
Density:	~ 8.31 - 8.34 LB/GL					
Vapor Pressure (vs. Air or mm Hg):	NE					
Vapor Density (vs. Air = 1):	NE NE					
Evaporation Rate:	Soluble					
Solubility in Water:	N.A.					
Percent Volatile:	NP					
VOC / Volume:	NP					
HAP / Volume:	NE					
Saturated Vapor Concentration:						

**Appearance and Odor** 

Odor: fish-like. Appearance: Liquid. amber.

# 10. Stability and Reactivity Stability: Unstable [ ] Stable [ X ]

Reactivity

Avoid: acids, alkalis, oxidizing agents.

# **Conditions To Avoid - Instability**

Extreme temperatures.

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# Novolac Hardener

## **Incompatibility - Materials To Avoid**

Avoid strong acids, bases, and oxidizing agents.

## **Hazardous Decomposition Or Byproducts**

Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide, and phenolics.

**Possibility of Hazardous** 

Will occur [ ]

Will not occur [X]

**Polymerization:** 

## **Conditions To Avoid - Hazardous Reactions**

Will not undergo hazardous polymerization in normal storage conditions.

# 11. Toxicological Information

# **Toxicological Information**

May cause sensitization by skin contact.

# **Chronic Toxicological Effects**

Skin sensitization.

## **Irritation or Corrosion**

Corrosive! Damages skin and eyes.

# **Symptoms related to Toxicological Characteristics**

Skin: Contact with substance may cause severe burns to skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Eyes: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Permanent eye damage including blindness could result.

Inhalation: Inhalation of vapors/fumes causes respiratory irritation with throat discomfort, coughing or difficulty breathing.

Ha	zardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
1.	Isophoronediamine	2855-13-2	n.a.	n.a.	n.a.	n.a.
2.	1,5-Pentanediamine, 2-methyl-	15520-10-2	n.a.	n.a.	n.a.	n.a.
3.	Phenol, 4-nonyl-, branched	84852-15-3	n.a.	n.a.	n.a.	n.a.

# 12. Ecological Information

# **General Ecological Information**

Avoid release to the environment. Do not empty into drains. May be hazardous to the environment if released in large quantities.

# Results of PBT and vPvB assessment

No data available.

# **Persistence and Degradability**

Not readily biodegradable.

# **Bioaccumulative Potential**

No data available.

## **Mobility in Soil**

not reported, unknown.

# 13. Disposal Considerations

# **Waste Disposal Method**

Incinerate or dispose of unused material, residues and containers in a licensed facility in accordance with all applicable local, state and federal regulations. Do not discharge substance/product into sewage system.

# 14. Transport Information

# **LAND TRANSPORT (US DOT)**

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**DOT Proper Shipping Name** 

(Non-Bulk)

CAUSTIC ALKALI LIQUID, N.O.S. (Contains Nonylphenol, Cycloaliphatic

Amines) MARINE POLLUTANT.

Marine Pollutant(s): Nonylphenol.

NOTE: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars or

aircraft.

8 **DOT Hazard Class:** 

**CORROSIVE DOT Hazard Label:** UN1719

Ш **Packing Group:** 

Corrosive! Damages skin and eyes. Avoid skin and eye contact. May cause eye **Precautionary Label** 

and skin irritation. May cause skin sensitization. Wear protective equipment and

clothing. Always read MSDS/SDS before use.

**AIR TRANSPORT (ICAO/IATA)** 

**UN/NA Number:** 

**ICAO/IATA Shipping Name** (Non-Bulk)

CAUSTIC ALKALI LIQUID, N.O.S. (Contains Nonylphenol, Cycloaliphatic

Amines)

(Bulk)

CAUSTIC ALKALI LIQUID, N.O.S. (Contains Nonylphenol, Cycloaliphatic

Amines) MARINE POLLUTANT.

Marine Pollutant(s): Nonylphenol.

NOTE: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars or

aircraft.

1719 **UN Number:** 

8 - CORROSIVE **Hazard Class:** 

Ш **Packing Group:** 

MARINE TRANSPORT (IMDG/IMO)

**IMDG/IMO Shipping Name** CAUSTIC ALKALI LIQUID, N.O.S. (Contains Nonylphenol, Cycloaliphatic

Amines) MARINE POLLUTANT.

Marine Pollutant(s): Nonylphenol.

**UN Number:** 1719

8 - CORROSIVE **Hazard Class:** 

Ш **Packing Group:** FA,SB

**IMDG EMS Number:** Yes **Marine Pollutant:** 

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# 15. Regulatory Information

# **US EPA SARA Title III**

Ha	zardous Components (Chemical Name)	CAS#	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1.	Isophoronediamine	2855-13-2	No	No	No	No
2.	1,5-Pentanediamine, 2-methyl-	15520-10-2	No	No	No	No
3.	Phenol, 4-nonyl-, branched	84852-15-3	No	No	No	No

# **Regulatory Information**

SARA Section 311/312: Acute, Chronic Health Hazard.

# 16. Other Information

CA=CIRCA NA=NOT AVAILABLE NE=NOT ESTABLISHED NR=NOT REGULATED NP= NOT APPLICABLE PR=PROPRIETARY TS=TRADE SECRET ?=UNKNOWN.

# **Company Policy or Disclaimer**

The information contained in this MSDS is taken from sources believed to be accurate as of the date hereof; however the Epoxy Systems, Inc. makes no expressed or implied warranty in respect to the accuracy of the information or the suitability of the recommendations, and assumes no liabilities to any user thereof.

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