

EPON™ Resin 824

Version 6.1

Print Date 07/05/2007

Revision Date 06/02/2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : EPON™ Resin 824

Product code : K2172

MSDS Number : 1129

Product Type : Epoxy resin.

Manufacturer, importer, supplier : Hexion Specialty Chemicals, Inc.
P. O. Box 4500
Houston TX 77210

Contact person : hsebox@hexion.com

Telephone : **General Information:**
(832) 486-6700

Emergency telephone:
CHEMTREC US Domestic (800) 424-9300
CHEMTREC International (703) 527-3887

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Human health hazards : Irritating to eyes and skin. May cause sensitization by skin contact. Contact with hot material can cause thermal burns.

Safety hazards : Not classified as flammable but will burn.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Weight %
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	85 % - 90 %
Modified Epoxy Resin	*	10 % - 15 %

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* The specific chemical identity of this component is considered trade secret information in accordance with 29 CFR 1910.1200.

SECTION 4. FIRST AID MEASURES

- Inhalation : Remove to fresh air. If rapid recovery does not occur, obtain medical attention.
- Skin contact : Remove contaminated clothing. If contact with hot product occurs immediately flush with cool water for 15 minutes. Carefully remove clothing; if clothing is stuck to a burn area do not pull it off, but cut around it. Cover burn area with a clean material. OBTAIN MEDICAL ATTENTION IMMEDIATELY.
- Eye contact : DO NOT DELAY. Flush eye with water. OBTAIN MEDICAL ATTENTION IMMEDIATELY.
- Ingestion : Do not induce vomiting. If rapid recovery does not occur, obtain medical attention.

Notes to physician

- Symptoms : Repeated skin contact may result in an allergic skin reaction causing itching, burning, redness and swelling. Irritation of the skin and eyes
- Treatment : Treat symptomatically. If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use water fog, foam, dry chemical or carbon dioxide.
- Specific hazards during fire fighting : Not classified as flammable but will burn. Carbon monoxide may be evolved if incomplete combustion occurs.
- Keep adjacent containers cool by spraying with water.
- Special protective equipment for fire-fighters : Full protective clothing and self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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Personal precautions	: Avoid contact with skin, eyes and clothing
Environmental precautions	: Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. If material enters drains, it should be pumped out into an open vessel.
Clean-up methods - small spillage	: Absorb or contain liquid with sand, earth or spill control material. Shovel up and place in a labelled, sealable container for subsequent safe disposal. Scrub contaminated surfaces with detergent solution Retain washings as contaminated waste. Put leaking containers in a labelled drum or overdrum.
Clean-up methods - large spillage	: Transfer to a labelled container for product recovery or safe disposal. Otherwise treat as for small spillage.
Additional advice	: See Section 13 for information on disposal.

SECTION 7. HANDLING AND STORAGE**Handling**

Advice on safe handling : Avoid contact with skin, eyes and clothing
This resin may be handled, shipped and stored at elevated temperature in bulk. The recommended pumping temperature is 180 Deg. F. To prevent thermal burns avoid contact with hot product.

Storage

Requirements for storage areas and containers : Keep container tightly closed and dry. Keep away from heat.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Protective measures : Wear protective clothing specified for normal operations.

Eye protection : Monogoggles

Hand protection : Nitrile rubber gloves
Butyl rubber gloves
gauntlet type

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- Skin and body protection : Standard issue work clothes
Safety shoes or boots - chemical resistant
- Respiratory protection : Not normally required.
In a confined space self-contained breathing apparatus may be required.

Exposure Guidelines

Components with workplace control parameters	Regulation	Exposure time	Value	Remarks
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	ACGIH			None established.
Modified Epoxy Resin	ACGIH			None established.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : Viscous liquid
- Colour : Light
- Boiling point : > 260 °C (> 500 °F)
- Flash point : 249 °F (249 °F) (Pensky-Martens)
- Vapour pressure : 0.04 mbar at 77 °C (171 °F)
- Relative density : 1.15
- Solubility in water : Negligible.

SECTION 10. STABILITY AND REACTIVITY

- Conditions to avoid : Caustic soda can induce vigorous polymerisation at temperatures around 200 °C.
- Materials to avoid : Strong oxidizing agents.
Caustic soda.
- Hazardous decomposition products : Hazardous decomposition products are not expected to form during normal storage.

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Hazardous reactions : Stable under normal use conditions.
 Reacts with strong oxidising agents.
 Polymerises exothermically with amines, mercaptans and Lewis acids at ambient temperature and above.
 Polymerises in contact with caustic soda.
 Reacts exothermically with bases (eg caustic soda), ammonia, primary and secondary amines, alcohols, water and acids.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : Expected to be of low toxicity, LD50 > 2000 mg/kg.
 Acute dermal toxicity : Expected to be of low toxicity, LD50 > 2000 mg/kg.
 Acute inhalation toxicity : no data available

Chronic Health Hazard

Components	Concentration	Regulation	Value	Remarks
Reaction product: bisphenol-A-(epiclorhydrin); epoxy resin (number average molecular weight <= 700)	85 % - 90 %	US. IARC Monographs on Occupational Exposures to Chemical Agents		This component has not been classified by the International Agency for Research on Cancer (IARC).
Modified Epoxy Resin	10 % - 15 %	US. IARC Monographs on Occupational Exposures to Chemical Agents		This component has not been classified by the International Agency for Research on Cancer (IARC).

Potential Health Effects

Inhalation : Based on its low volatility, the product is not likely to be an inhalation hazard.
 Skin : May be moderately irritating to the skin.

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	<p>Contact with hot material can cause thermal burns. May cause skin sensitization.</p>
Eyes	<p>: May be irritating to the eyes. Contact with hot material can cause thermal burns.</p>
Ingestion	<p>: Low order of acute oral toxicity.</p>
Aggravated Medical Condition	<p>: Preexisting skin and eye disorders may be aggravated by exposure to this product. Preexisting skin or lung allergies may increase the chance of developing increased allergy symptoms from exposure.</p>

SECTION 12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability : no data available

Ecotoxicity effects

Toxicity to fish : no data available

Other information : Ecotoxicological data have not been determined specifically for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Product disposal : If this material becomes a waste, it would not be a hazardous waste by RCRA criteria (40 CFR 261). Place in an appropriate disposal facility in compliance with local and federal regulations.

SECTION 14. TRANSPORT INFORMATION

CFR_ROAD NOT REGULATED FOR TRANSPORT

IMDG NOT REGULATED FOR TRANSPORT

IATA_C NOT REGULATED FOR TRANSPORT

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SECTION 15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Notification status

TSCA	:	All components listed.
DSL	:	All components listed.
EINECS	:	All components listed or polymer exempt.
AICS	:	All components listed.
PICCS (PH)	:	Not all components listed.
INV (CN)	:	Not all components listed.
KECI (KR)	:	All components listed.
ENCS (JP)	:	All components listed.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Reaction product: No RQ
 bisphenol-A-(epichlorhydrin); epoxy
 resin (number average molecular
 weight <= 700)

Modified Epoxy Resin No RQ

SARA 311/312 Hazards

Acute Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals(40 CFR 372. 65) - Supplier Notification Required

Reaction product: No De minimis Concentration
 bisphenol-A-(epichlorhydrin); epoxy
 resin (number average molecular
 weight <= 700)

Modified Epoxy Resin No De minimis Concentration

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**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)**

Reaction product: Threshold Planning Quantity: No TPQ
bisphenol-A-(epichlorhydrin); epoxy
resin (number average molecular
weight \leq 700)

Modified Epoxy Resin Threshold Planning Quantity: Not Listed

Reaction product: Reportable quantity: No RQ
bisphenol-A-(epichlorhydrin); epoxy
resin (number average molecular
weight \leq 700)

Modified Epoxy Resin Reportable quantity: Not Listed

New Jersey Right-To-Know Chemical List

Reaction product: Not Listed
bisphenol-A-(epichlorhydrin); epoxy
resin (number average molecular
weight \leq 700)

Modified Epoxy Resin Not Listed

Pennsylvania Right-To-Know Chemical List

Reaction product: Not Listed
bisphenol-A-(epichlorhydrin); epoxy
resin (number average molecular
weight \leq 700)

Modified Epoxy Resin Not Listed

Massachusetts Right-To-Know Chemical List

Reaction product: Not Listed
bisphenol-A-(epichlorhydrin); epoxy
resin (number average molecular
weight \leq 700)

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Modified Epoxy Resin

Not Listed

HMIS Rating : Health: 2
 Fire: 1
 Reactivity: 0

SECTION 16. OTHER INFORMATION

Reference : Prepared in accordance with 29 CFR 1910.1200.

The information provided herein was believed by Hexion Specialty Chemicals ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. HEXION MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HEXION, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product.

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