



Epic R3501

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 03/17/2020 Revision date: 03/17/2020 Version: 4.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Epic R3501
Product code : R3501

1.2. Recommended use and restrictions on use

Recommended use : Adhesives, sealants
Restrictions on use : Adhesives, sealants

1.3. Supplier

Epic Resins
600 Industrial Blvd.
Palmyra, WI 53156 - USA
T 800-242-6649
www.epicresins.com

1.4. Emergency telephone number

Emergency number : USA (CHEMTREC): 1- 800-424-9300, INTERNATIONAL: +1-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation, Category 2	H315 Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319 Causes serious eye irritation.
Skin sensitisation, Category 1	H317 May cause an allergic skin reaction.
Germ cell mutagenicity, Category 2	H341 Suspected of causing genetic defects.
Carcinogenicity, Category 2	H351 Suspected of causing cancer.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401 Toxic to aquatic life
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411 Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H341 - Suspected of causing genetic defects.
H351 - Suspected of causing cancer.
H401 - Toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing dust, fume, gas, mist, vapours, spray.
P264 - Wash hands, forearms, face and clothing thoroughly after handling.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection.
P302+P352 - If on skin: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.

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P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Contact a local certified and licensed waste disposal contractor or collection site to ensure proper and legal disposal.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : This product contains particulates (silica, calcium, pigments, etc.) that are blended into a liquid and pose no hazard as supplied. They may however be released if final product is cured and hardened then machined, such as; grinding, sanding, cutting, Etc.

Name	Product identifier	%	GHS-US classification
(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer	(CAS-No.) 25068-38-6	87 - 89	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Butyl Glycidyl Ether	(CAS-No.) 2426-08-6	11 - 13	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Muta. 2, H341 Carc. 2, H351 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Absorb spillage to prevent material damage. Clean up any spills as soon as possible, using an absorbent material to collect it.

6.1.1. For non-emergency personnel

Protective equipment : Avoid contact with skin and eyes; wear chemical protective clothing, eye protection and chemical resistant gloves.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, vapours, spray. Avoid contact with skin, eyes and clothing. Do not breathe vapours.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at a certified/authorized waste disposal site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Industrial Hygiene/Ventilation Safe Practices: Epic Resins urges prevention of skin, eye and respirable contact with this material. Since spraying and heating applications increase the potential for skin, eye and respirable exposures, stringent precautions must be taken to ensure the safety of the person(s) involved with these types of applications as well as other persons working in the area. Ventilation of at minimum of 10 air exchanges per hour is recommended. if ventilation is questionable, contact a local licensed HVAC Specialist and Certified Industrial Hygienist. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, vapours, spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

Maximum storage period : 12 months

Storage temperature : 25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Epic R3501	
No additional information available	
(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer (25068-38-6)	
No additional information available	
Butyl Glycidyl Ether (2426-08-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	n-Butyl glycidyl ether (BGE)
ACGIH TWA (ppm)	3 ppm
Remark (ACGIH)	Repro dam; Skin; DSEN
USA - OSHA - Occupational Exposure Limits	
Local name	n-Butyl glycidyl ether (BGE)

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OSHA PEL (TWA) (mg/m ³)	270 mg/m ³
OSHA PEL (TWA) (ppm)	50 ppm

8.2. Appropriate engineering controls

- Appropriate engineering controls : Industrial Hygiene/Ventilation Safe Practices: Epic Resins urges prevention of skin, eye and respirable contact with this material. Since spraying and heating applications increase the potential for skin, eye and respirable exposures, stringent precautions must be taken to ensure the safety of the person(s) involved with these types of applications as well as other persons working in the area. Ventilation of at minimum of 10 air exchanges per hour is recommended. if ventilation is questionable, contact a local licensed HVAC Specialist and Certified Industrial Hygienist.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses. Face shield. Protective clothing.

Materials for protective clothing:

neoprene/butyl rubber. nitrile rubber/PVC

Hand protection:

Chemical Resistant Protective Gloves. Ensure gloves remain in good condition during use and replace if any deterioration is observed. Gloves should be worn, Nitrile rubber gloves, Butyl rubber gloves, Neoprene gloves
. In case of repeated or prolonged contact wear 30 ml. neoprene gloves

Eye protection:

When splashing may occur, face shield must be worn. Wear security safety glasses or face shield that protects from splashes

Skin and body protection:

Wear suitable protective clothing. Chemical resistant apron. Long sleeved protective clothing

Respiratory protection:

If ventilation is questionable, consult with a certified Industrial Hygienist and HVAC specialist. In case of insufficient ventilation, wear suitable certified respiratory equipment per OSHA 29 CFR 1910.134 standard.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: clear
Odour	: mild Irritating
Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 160 °C
Flash point	: > 60 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: < 1 mm Hg
Relative vapour density at 20 °C	: No data available
Relative density	: No data available

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Density	: 1.13 g/cm ³
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 500 - 900 cP @ 900 RPM, 25C
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer (25068-38-6)

LD50 oral rat	> 2000 mg/kg (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
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Butyl Glycidyl Ether (2426-08-6)

LD50 oral rat	1865 mg/kg (Rat, Literature study, Oral)
ATE US (oral)	1865 mg/kg bodyweight
ATE US (dermal)	300 mg/kg bodyweight
ATE US (gases)	700 ppmv/4h
ATE US (vapours)	3 mg/l/4h
ATE US (dust,mist)	0.5 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Suspected of causing genetic defects.
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

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Butyl Glycidyl Ether (2426-08-6)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer (25068-38-6)	
LC50 fish 1	2.3 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

12.2. Persistence and degradability

(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer (25068-38-6)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer (25068-38-6)	
BCF other aquatic organisms 1	31 (Estimated value, Fresh weight)
Log Pow	3 (Estimated value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Butyl Glycidyl Ether (2426-08-6)	
Log Pow	0.63 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer (25068-38-6)	
Surface tension	59 mN/m (20 °C, 0.09 g/l)
Log Koc	2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for adsorption in soil.

Butyl Glycidyl Ether (2426-08-6)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : When handling waste, the safety precautions applying to handling of the product should be considered. Waste, residues, empty containers, discarded work clothes and contaminated cleaning material should be collected in designated containers, labeled with their contents. Dispose of surplus products and those that cannot be recycled via local licensed waste disposal contractor. Disposal of this product, process solutions, residues and by-products should at all times comply with state and federal waste disposal legislation any other local authority requirements. Do not cut or weld used containers unless they have been thoroughly cleaned and inspected for safe use.

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin), 9, III
UN-No. (IMDG) : 3082
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG) : III - substances presenting low danger
Limited quantities (IMDG) : 5 L
Marine pollutant : Yes



Air transport

Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin), 9, III
UN-No. (IATA) : 3082
Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.
Class (IATA) : 9 - Miscellaneous Dangerous Goods
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer (25068-38-6)

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
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Butyl Glycidyl Ether (2426-08-6)

EPA TSCA Regulatory Flag	TP - TP - indicates a substance that is the subject of a proposed TSCA section 4 test rule.
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International regulations

CANADA WHMIS D-2B

(Chloromethyl)oxirane, 4,4'-(1-methylethylidene)bisphenol Copolymer (25068-38-6)

Listed on the Canadian DSL (Domestic Substances List)

Butyl Glycidyl Ether (2426-08-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

National regulations

No additional information available

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15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Butyl Glycidyl Ether(2426-08-6)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/17/2020

Full text of H-statements:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects.

Hazard Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
- Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
- Personal protection : D,X
D - Face shield and eye protection, Gloves, Synthetic apron
X - Special handling directions

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.