

Safety Data Sheet
acc. to GHS, 3rd Edition

Print Date 12/02/2014

Revision Date 12/02/2014

· **Product Identifier**

· **Trade Name:** EP1285 Part A

· **Application of the Substance or Mixture:** Epoxy Resin

· **Details of the Supplier of the Safety Data Sheet (SDS)**

· **Manufacturer or Supplier:**

Resinlab, LLC
N109 W13300 Ellsworth Drive,
Germantown, WI 53022
1-800-388-8605
www.resinlab.com

· **Information Department:** Product Safety Department: msds@resinlab.com

· **Emergency Telephone Number:**

North America - Chemtrec: 1-800-424-9300 (24 hours)

International - Chemtrec: 01-703-527-3887 (24 hours)

2 Hazard Identification

· **Hazard Classification**



GHS08 Health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 2 H351 Suspected of causing cancer.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

· **Label Elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Pictogram(s)**



GHS07 GHS08

· **Signal Word** Warning

· **Hazard-determining Component(s)**

Bisphenol-A-(epichlorohydrin) epoxy resin
Butylglycidylether

· **Hazard statements**

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of causing genetic defects.
Suspected of causing cancer.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

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If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Specific treatment (see on this label).
 Wash contaminated clothing before reuse.
 IF exposed or concerned: Get medical advice/attention.
 If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 If on skin: Wash with plenty of water.
 Take off contaminated clothing and wash it before reuse.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection.
 Use personal protective equipment as required.
 Avoid release to the environment.
 Wash thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 See Section 8 Exposure control/personal protection for further relevant information.

Hazard Rating System

NFPA System

NFPA Ratings (scale 0 - 4)



NFPA special hazards (water reactivity and oxidizing property): None

HMIS System

HMIS Ratings (scale 0 - 4)



Other hazards

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/Information on Ingredients

Chemical Characterization: Mixtures

Composition/Information on Ingredients

CAS: 1344-28-1 EINECS: 215-691-6 RTECS: BD120000	Aluminum oxide (Al ₂ O ₃ Wetted form) Eye Dam. 2B, H320	70-80%
CAS: 25068-38-6 NLP: 500-033-5 Index Number: 603-074-00-8	Bisphenol-A-(epichlorohydrin) epoxy resin ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	20-<25%

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
 CAS: 2426-08-6
 EINECS: 219-376-4
 Index Number: 603-039-00-7
 RTECS: TX 4200000

Butylglycidylether

 Flam. Liq. 3, H226

 Muta. 2, H341; Carc. 2, H351

 Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335

 Eye Dam. 2B, H320

3-5%

Classification System:

The Classifications were based on the Toxicological and Ecological Data of the substances/mixtures in the Section 11 and 12.

4 First Aid Measures

Description of First Aid Measures
General Information

Ensure medical personnel are aware of exposure and take precautions for their personal protection; see Section 8 for the information of personal protection.

After Inhalation

Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing.

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

After Skin Contact

Remove all contaminated clothing and wash before reuse.

Wash contaminated skin with water and soap and rinse thoroughly.

Seek immediate medical advice.

After Eye Contact

Immediately bathe eyes for 15 minutes under running water.

Immediately remove contact lenses if present. Continue rinsing.

Seek immediate medical advice.

After Swallowing

If victim is unconscious; never give anything by mouth.

If victim is conscious; rinse out mouth and give victim small amounts of water.

Seek medical treatment in case of complaints.

After Exposure Get medical advice/attention at once.

Indication of any Immediate Medical Attention and Special Treatment Needed

After frequent or high intense exposure, the following medical tests are recommended:

eye tests

skin tests

Information for Doctor Have chemical containers, labels and/or (M)SDS ready when calling or visiting a medical center.

Additional Information

For additional information, please consult the corresponding first aid measures in the most current version of Emergency Response Guidebook which is produced by the US Department of Transportation.

5 Firefighting Measures

Extinguishing Media
Suitable Extinguishing Agent(s)

Use fire fighting measures and extinguishing agents that suit the environment.

In case of fire, suitable extinguishing agents are:

Alcohol resistant foam.

Dry chemical or fire-extinguishing powder.

 Carbon dioxide (CO₂).

Water spray or water fog.

Unsuitable Extinguishing Agent(s) Water with full jet

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· Firefighting Procedures

Isolate fire and deny unnecessary entry.

Immediately withdraw all personnel from the area in case of rising sound from venting safety device.

Eliminate all ignition sources if safe to do so.

Do not extinguish fire unless flow can be stopped.

Fight fire remotely due to the risk of explosion.

Burning liquids may be moved by flushing with water; protect personnel and minimize property damage.

Contain fire water runoff if possible to prevent environmental pollution.

Fight fire from protected location or safe distance.

Contain fire water runoff if possible to prevent environmental pollution.

· Special Hazards Arising in Fire

In case of fire, following can be released:

Phenolic compounds

Fluorine compounds

Benzoic Acid

Formaldehyde, a skin and lung sensitizer and a regulated carcinogen, may be formed during fires.

Carbon dioxide (CO₂) and Carbon monoxide (CO)

Sulphur dioxide (SO₂)

Aluminum oxide (Al₂O₃) dust, a serious respiratory irritant, may be formed during fires.

· Advice for Firefighters

If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156).

As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.

· Additional Information Ensure adequate and functional fire fighting facilities equipped in working area at all times.

6 Accidental Release Measures

· Personal Precautions

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during use.

Ensure personnel take precautions for their personal protection during clean up; see Section 8 for the specific requirements.

· Environmental Precautions

Keep away from sewage system or other water courses; do not penetrate ground/soil.

Inform respective authorities in case of any seepage to the environment.

· Cleaning Up Methods

Ensure adequate ventilation.

Eliminate all ignition sources.

Keep unauthorized personnel away.

For large spills:

Shut off source of leak if safe to do so.

Dike and contain.

Remove with vacuum trucks or pump to storage/salvage vessels.

Allow molten product to cool.

Absorb residues with liquid-binding materials.

For small spills:

Ventilate and wash area after clean-up is complete.

Collect spills in suitable and properly labeled containers.

Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.

Dispose contaminated chemicals as waste according to Section 13.

· Additional Information No further relevant information.

7 Handling and Storage

· Precautions for Safe Handling

Obtain special instruction before use; do not handle until all safety precautions have been read and understood.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

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Wear respiratory protection when handling.
Keep away from incompatible material(s).
Avoid any release into the environment.

Observe all the personal protection requirements in Section 8.

· **Information about Protection Against Explosions and Fires**

Will not burn unless preheated.

Keep away from heat, sparks, open flame and other ignition sources during handling.

· **Storage**

· **Requirements to be Met by Storerooms and Receptacles**

Store in a well-ventilated place; provide ventilation for receptacles.

Keep stored in accordance with local, regional, national, and international regulations.

· **Information about Storage in One Common Storage Facility**

Store away from incompatible material(s).

Store away from foodstuffs.

Avoid release to the environment.

· **Additional Information** No further relevant information.

8 Exposure Controls and Personal Protection

· **Engineering Measures or Controls**

· **Exposure Limit Values that Require Monitoring at the Workplace**

2426-08-6 Butylglycidylether

PEL (USA) Long-term value: 270 mg/m³, 50 ppm

REL (USA) Ceiling limit value: 30 mg/m³, 5.6 ppm
*15-min

TLV (USA) Long-term value: 16 mg/m³, 3 ppm
Skin; DSEN

· **Additional Information for the Limit Values**

As a SUSPECTED CARCINOGEN, there may be NO safe level of exposure; reduce all contact to the lowest possible level.

· **Other Engineering Measures or Controls**

Ventilation rates should be matched to conditions.

If applicable, use process enclosure(s), local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

· **Personal Protective**

· **General Protective and Hygienic Measures**

Avoid any skin contact.

Do not eat, drink or smoke during work.

Avoid any contact with the eye.

Keep food, drink or feed away from working area.

Contaminated work clothing is not allowed out of workplace.

Clean hands and exposed skin thoroughly after work and before breaks.

· **Personal Protective Equipment (PPE)**

· **Breathing Equipment**

Caution! Improper use of respirators is dangerous.

In case of brief exposure or low pollution, use a respiratory filter device.

In case of intensive or longer exposure, use a positive-pressure respiratory protective device that is independent of circulating air.

· **Hand Protection**



Protective gloves

Selection of glove material should take into consideration the penetration times, rates of diffusion, and the degradation.

Suggested glove type(s):

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- Nitrile Gloves
- Butyl Rubber Gloves
- **Eye Protection**



Tightly sealed goggles

- **Body Protection** No relevant information.

- **Additional Information**

All protective clothing (suits, gloves, footwear, headgear) should be clean, available every day, and put on before work.
 The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.

9 Physical and Chemical Properties

- **Information on Basic Physical and Chemical Properties**

- **Appearance:**

- **Form:** Liquid
- **Color:** Black
- **Odor:** Mild epoxy odor
- **Odor Threshold:** Not determined.

- **PH-Value:** Not determined.

- **Change in Condition:**

- **Melting Point:** Not determined.
- **Boiling Point:** Not determined.
- **Flash Point:** > 93 °C (> 199 °F)
- **Decomposition Temperature:** Not determined.
- **Flammability:** Not determined
- **Explosion:** Not determined.
- **Explosion Limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.

- **Vapor Pressure:** Not determined.
- **Density at 25 °C (77 °F):** 2.3 g/cm³ (19.194 lbs/gal)
- **Solubility in or Miscibility with**
- **Water:** Not miscible or difficult to mix.
- **Viscosity:**
- **Dynamic at 20 °C (68 °F):** 80000 mPas
- **Kinematic:** Not determined.

- **Additional Information** No further relevant information.

10 Stability and Reactivity

- **Physical Hazard(s)** Not a regulated reactive or physical hazard under GHS.

- **Hazardous Reactivity and Chemical Stability**

May form explosive vapor-air mixtures when heated above the flash point.
 May polymerize when heated.

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· **Thermal Decomposition and Conditions to be Avoided**

Keep away from incompatible material(s).

Thermally decomposes during fire or high heat; keep away from heat, sparks, open flame and other ignition sources.

· **Possibility of Other Hazardous Reaction(s)**

May act catalytically with ethylene oxide or vinyl chloride causing irreversible polymerization with considerable heat buildup.

· **Incompatible Material(s)**

Oxidizing agents

Vinyl acetate

Acids

Chlorinated rubber

Bases (Alkalis)

Nitrates

· **Hazardous Decomposition Product(s)**

Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.

· **Hazardous Polymerization Product(s)** No relevant information.

· **Additional Information** No further relevant information.

11 Toxicological Information

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Potential Health Effect(s):** Suspected of causing genetic defects.

· **Additional Information** For additional detailed Toxicological Information, please email the Product Safety Department.

12 Ecological Information

For detailed Ecological Information, please email the Product Safety Department.

13 Disposal Considerations

· **Hazardous Waste List**

· **Description:** It may be necessary to contain and dispose of the substance/mixture as a hazardous waste.

· **RCRA Waste:**

2426-08-6 Butylglycidylether

D001 3-<5%

· **Waste Treatment Recommendation:**

Generation of waste should be avoided or minimized wherever possible.

Chemical waste, even small quantities, is neither allowed to be poured down drains, sewage system or waterways; nor disposed with household garbage.

Dispose of contents/containers in accordance with local, regional, national, and international regulations.

· **Unused and Uncontaminated Packagings**

· **Recommendation** Dispose of according to your local waste regulations.

14 Transport Information

· **UN-Number**

· **DOT, ADR, IMDG, IATA**

UN3082

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<ul style="list-style-type: none"> · UN Proper Shipping Name · DOT, ADR, IMDG, IATA 	Environmentally hazardous substances, liquid, n.o.s. Epoxy Resin
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT, IMDG, IATA 	Not regulated for transport; not applicable.
 <ul style="list-style-type: none"> · Class · Label 	9 Miscellaneous dangerous substances and articles 9
<ul style="list-style-type: none"> · ADR  <ul style="list-style-type: none"> · Class · Label 	9 (M6) Miscellaneous dangerous substances and articles 9
<ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA 	Not regulated for transport; not applicable. III
<ul style="list-style-type: none"> · Environmental Hazards: · Marine Pollutant: · Special Marking (ADR): · Special Marking (IATA): 	Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · Special Precautions: · Danger Code (Kemler): · EMS Number: 	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F
<ul style="list-style-type: none"> · Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional Information: · ADR · Excepted quantities (EQ) 	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN3082, Environmentally hazardous substances, liquid, n.o.s. Epoxy Resin, 9, III

15 Regulatory Information

- **USA Regulation Lists**
- **SARA (Superfund Amendments and Reauthorization Act of 1986)**

- **Section 302 (Extremely Hazardous Substances)**

None of the ingredients is listed.

- **Section 313 (Toxics Release Inventory (TRI) reporting)**

None of the ingredients is listed.

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Section 311/312 (Hazardous Chemical Inventory Reporting)

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin	A, C	20-<25%
2426-08-6	Butylglycidylether	A, C, F	3-<5%
1333-86-4	Carbon black (Wetted form)	A, C	0.1-<0.3%

Hazard Abbreviations for SARA 311/312

- A - Acute Health Hazard
- C - Chronic Health Hazard
- F - Fire Hazard
- R - Reactive Hazard
- S - Sudden Release of Pressure Hazard

TSCA (Toxic Substances Control Act)

All ingredients are listed.

Proposition 65
Chemicals Known to Cause Cancer

106-89-8 | 1-chloro-2,3-epoxypropane

Chemicals Known to Cause Reproductive Toxicity for Females

None of the ingredients is listed.

Chemicals Known to Cause Reproductive Toxicity for Males

106-89-8 | 1-chloro-2,3-epoxypropane

Chemicals Known to Cause Developmental Toxicity

None of the ingredients is listed.

Carcinogenic Categories
EPA (Environmental Protection Agency)

None of the ingredients is listed.

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

TLV (Threshold Limit Value Established by ACGIH)

1333-86-4 | Carbon black (Wetted form)

A4

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

International Regulation Lists
Canadian Domestic Substance Listings:

1344-28-1	Aluminum oxide (Al ₂ O ₃ Wetted form)
25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica (Wetted form)
1333-86-4	Carbon black (Wetted form)

Canadian Ingredient Disclosure list (limit 0.1%)

2426-08-6 | Butylglycidylether

Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

Chinese Chemical Inventory of Existing Chemical Substances:

All ingredients are listed.

Japanese Existing and New Chemical Substance List:

All ingredients are listed.

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· **Korean Existing Chemical Inventory:**

All ingredients are listed.

· **European Pre-registered substances:**

All ingredients are listed.

· **REACH - Substances of Very High Concern (SVHC) List:**

None of the ingredients is listed.

· **Restriction of Hazardous Substances Directive (RoHS) list:**

None of the ingredients is listed.

16 Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department Issuing (M)SDS:** Product Safety Department
- **Contact:** msds@resinlab.com

· **Abbreviations and acronyms:**

- ACGIH: American Conference of Governmental Industrial Hygienists
- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DOT: US Department of Transportation
- ECHA: European Chemicals Agency's Dissemination portal with information on chemical substances registered under REACH
- HMIS: US National Paint & Coatings Association (NPCA) Hazardous Materials Identification System
- IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO)
- ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO)
- IMDG: International Maritime Dangerous Goods; the principal international rules for International Carriage of Dangerous Goods by SEA under the Recommendations on the Transport of Dangerous Goods by United Nations (RTDG)
- IUCLID: EU REACH International Uniform Chemical Information Database
- LC50/LD50: Lethal Concentration/Dose, 50 percent
- N/a: Not available or Not applicable
- NFPA: US National Fire Protection Association
- NIOSH: US National Institute of Occupational Safety and Health
- NLM TOXNET: US National Library of Medicine Toxicology Data Network
- OSHA: US Occupational Safety and Health Administration
- P: Marine Pollutant
- RCRA: Resource Conservation and Recovery Act (USA)
- REACH: EU Registry, Evaluation and Authorisation of Chemicals
- SARA: US Superfund Amendments and Reauthorization Act
- TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE)
- TSCA: US Toxic Substance Control Act

- **Date of preparation / last revision** 12/02/2014 / 3