

Safety Data Sheet acc. to OSHA HCS

Printing date 03/05/2018

Reviewed on 03/05/2018

1 Identification

- **Product identifier**
 - **Trade name:** EP1325
 - **Recommended use** One part, heat cured epoxy adhesive
 - **Restrictions on use** For industrial use only
- **Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
ResinLab, LLC
N109 W13300 Ellsworth Drive
Germantown, WI 53022
1-877-259-1669
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(s) identification

- **Classification of the substance or mixture**
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).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Bisphenol-A-(epichlorohydrin) epoxy resin
- **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
- **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Collect spillage.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

· NFPA System

· NFPA ratings (scale 0 - 4)



Health = 2
Fire = 1
Reactivity = 0

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

· HMIS System

· HMIS-ratings (scale 0 - 4)



Health = 2
Fire = 1
Reactivity = 0

· Other hazards

- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

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3 Composition/information on ingredients

Chemical characterization: Mixtures

Dangerous components:

CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8	Bisphenol-A-(epichlorohydrin) epoxy resin Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	60-70%
CAS: 67762-90-7 EC number: 614-122-2	Siloxanes and Silicones, di-Me, reaction products with silica	2.5-5%
CAS: 1333-86-4 EINECS: 215-609-9 RTECS: FF5800000	Carbon black	0.1-1%
CAS: 14808-60-7 EINECS: 238-878-4 RTECS: VV 7330000	Quartz	≥0-<0.1%

Additional information:

If the chemical name/CAS number is proprietary and or weight percentage is listed as a range, the specific chemical identity and or percentage of composition has been withheld as a trade secret.

4 First-aid measures

Description of first aid measures

General information:

Keep warm, position comfortably and cover well.
Immediately remove any clothing soiled by the product.

After inhalation:

Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing.
Supply fresh air and if symptoms occur call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.
Remove all contaminated clothing and wash before reuse.
If skin rash or irritation occurs, seek medical advice.

After eye contact:

Immediately flush opened eyes with water for 5 minutes, then remove contact lenses if present, continue flushing for at least another 15 minutes.
If symptoms develop seek medical attention.

After swallowing:

If victim is unconscious; never give anything by mouth.
Do NOT induce vomiting.
If victim is conscious, rinse out mouth with water.
Get medical attention if you feel unwell.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed

Check section 11 Toxicological Information for further relevant information.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

Carbon dioxide
Alcohol resistant foam
dry chemical
water fog

For safety reasons unsuitable extinguishing agents:

Water with full jet

Special hazards arising from the substance or mixture

Will not burn unless preheated.

In case of fire, the following can be released:

Phenolic compounds
May generate ammonia gas.
Phenolics

Advice for firefighters

Protective equipment:

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.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

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

Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up:

For large spills: provide diking or containment to minimize spreading. If possible pump and store material in appropriate container.

For small spills: Ventilate and wash area. Collect spills and absorbant material in appropriate container.

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Ensure adequate ventilation.
Allow molten product to cool.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
 - Avoid breathing vapor or spray mists.
 - Ensure good ventilation/exhaustion at the workplace.
 - Prevent formation of aerosols.
 - Keep away from incompatible material(s).
 - Avoid any release into the environment.
 - Do not breathe dust/fumes/mist/vapor/spray.
 - Avoid contact with eyes, skin and clothing.
 - Keep away from heat, sparks, flames and ignition sources.
 - Observe all the personal protection requirements in Section 8.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:**
 - Provide ventilation for receptacles.
 - Keep stored in accordance with local, regional, national, and international regulations.

8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

OSHA PEL Short-term value: 15 mg/m³

US ACGIH Short-term value: 10 mg/m³

1333-86-4 Carbon black

PEL Long-term value: 3.5 mg/m³

REL Long-term value: 3.5* mg/m³

*0.1 in presence of PAHs; See Pocket Guide Apps.A+C

TLV Long-term value: 3* mg/m³

*inhalable fraction

14808-60-7 Quartz

PEL see Quartz listing

REL Long-term value: 0.05* mg/m³

*respirable dust; See Pocket Guide App. A

TLV Long-term value: 0.025* mg/m³

*as respirable fraction

· **Additional Occupational Exposure Limit Values for possible hazards during processing:** None.

· Exposure controls

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

If exposure limits have not been established, maintain airborne levels to an acceptable level.

· Personal protective equipment:

· General protective and hygienic measures:

Be sure to clean skin thoroughly after work and before breaks.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

· Personal Protective Equipment (PPE)

· Breathing equipment:

Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits.

Use a NIOSH approved air-purifying organic vapor respirator if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves



Chemical resistant gloves

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Eye protection:



Safety Glasses with side shields

Body protection: Appropriate chemical resistant clothing.

Limitation and supervision of exposure into the environment

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

General Information

Appearance:

Form:

Pasty

Color:

Black

Odor:

Mild epoxy odor

Odor threshold:

Not determined.

pH-value:

Not determined.

Change in condition

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

>200 °C (>392 °F)

Flash point:

>200 °C (>392 °F)

Flammability (solid, gaseous):

Not applicable.

Ignition temperature:

Not determined.

Auto igniting:

Product is not selfigniting.

Danger of explosion:

Product does not present an explosion hazard.

Explosion limits:

Lower:

Not determined.

Upper:

Not determined.

Vapor pressure:

Not determined.

Vapor Density:

not determined

Density at 20 °C (68 °F):

 1.29 g/cm³ (10.77 lbs/gal)

Relative density

Not determined.

Vapor density

Not determined.

Evaporation rate

Not determined.

Solubility in / Miscibility with

Water:

Not miscible or difficult to mix.

Partition coefficient (n-octanol/water):

Not determined.

Henry's Law Constant:

Not determined.

Viscosity:

Dynamic:

Not available.

Kinematic:

Not available.

VOC content:

 0.00 %
 0.0 g/l / 0.00 lb/gal

10 Stability and reactivity

Reactivity Not a regulated physical hazard under GHS.

Hazardous Reactivity and Chemical Stability May polymerize in contact with sodium hydroxide.

Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions In contact with incompatible materials.

Conditions to avoid Keep away from heat, sparks, flame and any other ignition sources.

Incompatible materials:

Oxidizing agents

Mercaptans

Acids

Amines

Bases (Alkalies)

Hazardous decomposition products: Possible in traces.

Additional information:

As long as the prescribed application concentrations are maintained there is no danger that stable emulsions will form.

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11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin

Oral	LD50	11,400 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit) (Test guideline not available)
Inhalative	LC50/4 h	mg/l (Test species: n/a) (Toxicity not expected based on the acute oral data)

14807-96-6 Talc

Oral	LD50	mg/kg (No data available)
Dermal	LD50	mg/kg (Test species: n/a) (No adverse effects known) Reference: IUCLID Dataset (2000).
Inhalative	LC50/4 h	mg/l (No data available) (Toxicity not anticipated under normal conditions)

Epoxy Polyamine Adduct

Oral	LD50	mg/kg (No data available)
Dermal	LD50	mg/kg (No data available)
Inhalative	LC50/4 h	mg/l (No data available)

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

Oral	LD50	>5,000 mg/kg (rat) (test method not specified)
Dermal	LD50	mg/kg (Test species: n/a) (Toxicity not expected based on acute oral data)
Inhalative	LC50/4 h	mg/l (Test species: n/a) (Toxicity not expected based on acute oral data)

Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)

14807-96-6	Talc	3
1333-86-4	Carbon black	2B
14808-60-7	Quartz	1

NTP (National Toxicology Program)

14808-60-7	Quartz	K
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OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity:

25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin

EC50	mg/kg (rabbit)
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14807-96-6 Talc

EC50	mg/kg (Human)
There was no or very slight irritation observed in humans.	
(rabbit)	
Primary cutaneous irritation tests showed no trace of irritation in rabbits.	
The substance was not classified as a dermal irritant.	
Reference: IUCLID Dataset (2000).	

Epoxy Polyamine Adduct

EC50	mg/kg (No data available)
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67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

EC50	mg/kg (Test species: n/a) (Primary irritation index=0)
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Persistence and degradability No further relevant information available.

Other information: The product is easily biodegradable.

Behavior in environmental systems:

Bioaccumulative potential No data available.

Mobility in soil No further relevant information available.

Additional ecological information: The product is non-rapid degradable, and low or not highly bioaccumulative.

General notes:

Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

PBT: None of the ingredients is listed.

vPvB: None of the ingredients is listed.

Other adverse effects No further relevant information available.

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13 Disposal considerations

- Waste treatment methods
 - Recommendation: Must be specially treated adhering to official regulations. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
 - Recommendation: Dispose of according to your local waste regulations.

14 Transport information

- UN-Number
DOT, IMDG, IATA UN3082
- UN proper shipping name
DOT Environmentally hazardous substances, liquid, n.o.s. (Bisphenol-A-(epichlorohydrin) epoxy resin)
IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-(epichlorohydrin) epoxy resin), MARINE POLLUTANT
IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-(epichlorohydrin) epoxy resin)
- Transport hazard class(es)
DOT, IMDG, IATA

 - Class 9 Miscellaneous dangerous substances and articles
 - Label 9
- Packing group
DOT, IMDG, IATA III
- Environmental hazards: Not applicable.
- Special precautions for user
Warning: Miscellaneous dangerous substances and articles
 Danger code (Kemler): 90
 EMS Number: F-A, N/A
 Stowage Category A
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
- Transport/Additional information:
 - DOT
 - Quantity limitations On passenger aircraft/rail: No limit
On cargo aircraft only: No limit
 - Remarks: Special marking with the symbol (fish and tree).
 - IMDG
 - Limited quantities (LQ) 5L
 - Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
- UN "Model Regulation": UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (BISPHENOL-A-(EPICHLOROHYDRIN) EPOXY RESIN), 9, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture

- SARA Section 355 (extremely hazardous substances):

None of the ingredients is listed.

- SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- SARA Section 311/312 (Hazardous Chemical Inventory Reporting)

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin	A, C	60-70%
1333-86-4	Carbon black	A, C	0.1-1%

- 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

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TSCA 8 (b) Inventory:

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
14807-96-6	Talc
	Epoxy Polyamine Adduct
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
14808-60-7	Quartz

Proposition 65

Chemicals known to cause cancer:

1333-86-4	Carbon black
14808-60-7	Quartz
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
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Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

14807-96-6	Talc	A4
1333-86-4	Carbon black	A4
14808-60-7	Quartz	A2

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

14808-60-7	Quartz
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International Regulation Lists

GHS label elements GHS label elements

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.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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 Development Department
- Contact: msds@resinlab.com
- Date of preparation / last revision 03/05/2018 / 2
- * Data compared to the previous version altered.