

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/01/2017

Reviewed on 06/01/2017

1 Identification

- Product identifier
 - Trade name: **EP1405 A**
 - Application of the substance / the mixture *Epoxy Resin*
- 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: mstds@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
 - 1,1,1-trimethylolpropane triacrylate
 - Diglycidyl ether of neopentyl glycol
 - 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
 - Do not breathe dust/fume/gas/mist/vapors/spray.
 - Wash thoroughly after handling.
 - Use only outdoors or in a well-ventilated area.
 - 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 INHALED: Remove person to fresh air and keep comfortable for breathing.
 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - Get medical advice/attention if you feel unwell.
 - 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.
- Additional information:
 - 16 % of the mixture consists of component(s) of unknown toxicity.
- 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

 - Health = *2
 - Fire = 1
 - Reactivity = 0

- Other hazards
 - Results of PBT and vPvB assessment
 - PBT: Not applicable.

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· vPvB: Not applicable.

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	25-30%
CAS: 15625-89-5 EINECS: 239-701-3 Index number: 607-111-00-9 RTECS: AT 4810000	1, 1, 1-trimethylolpropane triacrylate Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	20-30%
CAS: 65997-17-3 EINECS: 266-046-0	Fibrous Glass	10-20%
CAS: 13560-89-9 EINECS: 236-948-9	Bis(hexachlorocyclopentadieno) STOT RE 2, H373	10-20%
CAS: 67762-90-7 EC number: 614-122-2	Siloxanes and Silicones, di-Me, reaction products with silica	1-2.5%
CAS: 17557-23-2 EINECS: 241-536-7 Index number: 603-094-00-7 RTECS: TX3760000	Diglycidyl ether of neopentyl glycol Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335 Eye Dam. 2B, H320	0.1-<1%
CAS: 25085-99-8 EC number: 600-013-7	Bisphenol-A-(epichlorohydrin) epoxy resin Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317 Aquatic Acute 2, H401	0.1-<0.25%

· 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:

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 irritation or rash occurs, get medical advice/attention.

· 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 irritation persists continue flushing and obtain medical attention immediately.

· After swallowing:

If victim is unconscious; never give anything by mouth.
Rinse out mouth and then drink plenty of 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: Limestone powder

· Special hazards arising from the substance or mixture

Will not burn unless preheated.
In case of fire, the following can be released:
Hydrogen chloride (HCl)
Carbon dioxide (CO₂) and Carbon monoxide (CO)
Phenolic compounds

· Advice for firefighters

· Protective equipment:

Mouth respiratory protective device.
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.

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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:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **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.
Ensure adequate ventilation.
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**
Ensure good ventilation/exhaustion at the workplace.
Do not breathe dust created by sanding, grinding or machining.
Prevent formation of aerosols.
Keep away from incompatible material(s).
Avoid any release into the environment.
For industrial or professional use only
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:**

15625-89-5 1,1,1-trimethylolpropane triacrylate	
WEEL	Long-term value: 1 mg/m ³ Skin
65997-17-3 Fibrous Glass	
ACGIH TLV	Long-term value: 10 mg/m ³
OSHA PEL	Long-term value: 15 mg/m ³ Total dust
13560-89-9 Bis(hexachlorocyclopentadieno)	
TWA	Short-term value: 1 mg/m ³ MFG recommendation 8 hour TWA
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
OSHA PEL	Short-term value: 15 mg/m ³
US ACGIH	Short-term value: 10 mg/m ³

· **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:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- 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

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- Material of gloves



Chemical resistant gloves

- 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:

Highly viscous

- Color:

Blue/Green

- Odor:

Mild epoxy odor

- Odor threshold:

Not determined.

- pH-value:

Not determined.

- Change in condition

- Melting point/Melting range:

Undetermined.

- Boiling point/Boiling range:

Undetermined.

- Flash point:

94 °C (201 °F)

- Flammability (solid, gaseous):

Not applicable.

- Ignition temperature:

Not determined.

- Decomposition 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):

0.68 g/cm³ (5.675 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.

- Viscosity:

- Dynamic at 20 °C (68 °F):

40000 mPas

- Kinematic:

Not determined.

- Solvent content:

- Organic solvents:

not determined

- VOC content:

not determined

- VOC content:

not determined

- Solids content:

17.2 %

10 Stability and reactivity

- Reactivity Not a regulated physical hazard under GHS.

- Hazardous Reactivity and Chemical Stability May polymerize during high temperatures.

- 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 Reacts with alcohols.

- Conditions to avoid

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

The substance/mixture is combustible; avoid:

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- **Incompatible materials:**
Reducing agents
inert gases, free radical initiators, oxygen scavengers.
Amines
Mercaptans
Oxidizing agents
- **Hazardous decomposition products:**
Possible in traces.
Refer to section 5.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
 - **LD/LC50 values that are relevant for classification:**
Not a classified acute oral hazard.

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

Oral	LD50	11400 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit) (Test guideline not available)
Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected based on the acute oral data)

31452-80-9 Dibromoneopentyl glycol, chloromethyloxirane polymer

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

15625-89-5 1,1,1-trimethylolpropane triacrylate

Oral	LD50	5700 mg/kg (rat) (Calculated from 5.19 mL/kg) Reference: ChemID Full Record (2011).
Dermal	LD50	2500 mg/kg (mouse) Reference: HSNO CCID (2011).
Inhalative	LC50/4 h	(Test species: n/a) (None or low toxicity based on the acute oral data)

65997-17-3 Fibrous Glass

Oral	LD50	2000-5000 mg/kg LD50 estimated to be between 2000-5000 mg/kg. Reference: Vendor SDS 2015
Dermal	LD50	>5000 mg/kg LD50 estimated to be >5000 mg/kg Reference: Vendor SDS 2015
Inhalative	LC50/4 h	(mouse) LD > 20 mg/kg Exposure time unknown. Reference: ChemID (2010).

13560-89-9 Bis(hexachlorocyclopentadieno)

Oral	LD50	> 25000 mg/kg (rat) Reference: EPA HPVVIS (2011).
Dermal	LD50	> 8000 mg/kg (rabbit) No mortality was observed; the substance was not classified as an acute oral hazard. Reference: EPA HPVVIS (2011).
Inhalative	LC50/4 h	> 2.25 mg/l (rat) No mortality or any adverse effects were observed; classification was not possible. Reference: ACToR (2011).

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

Oral	LD50	>5000 mg/kg (rat) (test method not specified)
Dermal	LD50	(Test species: n/a) (Toxicity not expected based on acute oral data)
Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected based on acute oral data)

- **Specific symptoms in biological assay:** Not a classified acute dermal hazard.

- **Primary irritant effect:**

- cough
- shortness of breath
- Not a classified acute inhalative hazard.
- **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)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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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 Irritating mg/kg (rabbit)

31452-80-9 Dibromoneopentyl glycol, chloromethyloxirane polymer

EC50 (No data available)

15625-89-5 1,1,1-trimethylolpropane triacrylate

EC50 Irritating mg/kg (rabbit) (Skin irritation: 5/8 (Max. 8))

Skin irritation: 5/8 (Max. 8; mean score of all treated animals).

The substance was classified as irritating to rabbit skin (Category 2) based on the classification criteria.

Reference: Cognis (M)SDS (2007) and IUCLID Dataset (2000).

65997-17-3 Fibrous Glass

EC50 The substance in dust form causes skin irritation.

Reference: Haz-Map (2010).

13560-89-9 Bis(hexachlorocyclopentadieno)

EC50 (No data available)

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

EC50 Non-irritating mg/kg (Test species: n/a) (Primary irritation index=0)

· **Persistence and degradability** No further relevant information available.

· **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.

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 proper shipping name**

· DOT, IMDG, IATA

Not regulated for transport; not applicable.

Not regulated

· **Environmental hazards:**

· Marine pollutant:

Yes

· **Special precautions for user**

· Stowage Category

Not applicable.

A

· **Transport in bulk according to Annex II of MARPOL73/78 and the**

IBC Code

Not applicable.

· **UN "Model Regulation":**

not regulated

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

25-30%

31452-80-9 Dibromoneopentyl glycol, chloromethyloxirane polymer

A

20-30%

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15625-89-5	1,1,1-trimethylolpropane triacrylate	A, R	20-30%
65997-17-3	Fibrous Glass	Acute Health, Chronic Health	10-20%
25085-99-8	Bisphenol-A-(epichlorohydrin) epoxy resin	A, C	0.1-<0.25%

· 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):

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65997-17-3	Fibrous Glass
13560-89-9	Bis(hexachlorocyclopentadieno)
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
17557-23-2	Diglycidyl ether of neopentyl glycol
25085-99-8	Bisphenol-A-(epichlorohydrin) epoxy resin

· Proposition 65

· Chemicals known to cause cancer:

106-89-8	1-chloro-2,3-epoxypropane
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· 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)

None of the ingredients is listed.

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

None of the ingredients is listed.

· International Regulation Lists

· Chinese Chemical Inventory of Existing Chemical Substances:

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
31452-80-9	Dibromoneopentyl glycol, chloromethyloxirane polymer
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25085-99-8	Bisphenol-A-(epichlorohydrin) epoxy resin

· GHS label elements GHS label elements

· National regulations:

· Japanese Existing and New Chemical Substance List:

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
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15625-89-5	1,1,1-trimethylolpropane triacrylate
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17557-23-2	Diglycidyl ether of neopentyl glycol
25085-99-8	Bisphenol-A-(epichlorohydrin) epoxy resin

· Korean Existing Chemical Inventory:

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
31452-80-9	Dibromoneopentyl glycol, chloromethyloxirane polymer
15625-89-5	1,1,1-trimethylolpropane triacrylate
65997-17-3	Fibrous Glass
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67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
17557-23-2	Diglycidyl ether of neopentyl glycol
25085-99-8	Bisphenol-A-(epichlorohydrin) epoxy resin

· European Pre-registered substances:

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
31452-80-9	Dibromoneopentyl glycol, chloromethyloxirane polymer
15625-89-5	1,1,1-trimethylolpropane triacrylate

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· **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** 06/01/2017 / 4
 - *** Data compared to the previous version altered.**