

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/14/2017

Reviewed on 06/14/2017

1 Identification

- **Product identifier**
 - **Trade name:** EP1295 Black 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: 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.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
STOT RE 2 H373 May cause damage to the adrenal glands through prolonged or repeated exposure. Route of exposure: Oral.

- **Label elements**

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



GHS07 GHS08

- **Signal word** Warning

- **Hazard-determining components of labeling:**

Bisphenol-A-(epichlorohydrin) epoxy resin
Triarylphosphate isopropylated
Alkyl (C12, C14) glycidyl ether
1,1,1-trimethylolpropane triacrylate

- **Hazard statements**

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to the adrenal glands through prolonged or repeated exposure. Route of exposure: Oral.

- **Precautionary statements**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
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 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.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification 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.

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/14/2017

Reviewed on 06/14/2017

Trade name: EP1295 Black A

· vPvB: Not applicable.

(Contd. of page 1)

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: 68937-41-7 EINECS: 273-066-3	Triarylphosphate isopropylated Repr. 2, H361; STOT RE 2, H373 Aquatic Acute 1, H400; Aquatic Chronic 2, H411	10-20%
CAS: 68609-97-2 EINECS: 271-846-8 Index number: 603-103-00-4	Alkyl (C12, C14) glycidyl ether Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	5-<10%
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	5-<10%
CAS: 67762-90-7 EC number: 614-122-2	Siloxanes and Silicones, di-Me, reaction products with silica	0.1-1%
CAS: 1333-86-4 EINECS: 215-609-9 RTECS: FF5800000	Carbon black	0.1-1%

· **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.

· **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 contaminated clothing and shoes.

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 symptoms develop seek medical attention.

· **After swallowing:**

If victim is unconscious; never give anything by mouth.

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

Get medical attention

· **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:**

Use fire fighting measures that suit the environment.

Alcohol resistant foam

Fire-extinguishing powder

Carbon dioxide

water fog

Water spray

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards arising from the substance or mixture**

May spontaneously polymerize during fire or high temperatures generating massive heat and pressure.

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Carbon dioxide (CO₂) and Carbon monoxide (CO)

Phenolic compounds

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

· **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.

(Contd. on page 3)

US

Safety Data Sheet acc. to OSHA HCS

Printing date 06/14/2017

Reviewed on 06/14/2017

Trade name: EP1295 Black A

(Contd. of page 2)

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:** Dilute with plenty of 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 liquid components with liquid-binding material.
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
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:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

15625-89-5 1,1,1-trimethylolpropane triacrylate	
WEEL	Long-term value: 1 mg/m ³ Skin
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
1333-86-4 Carbon black	
PEL	Long-term value: 3.5 mg/m ³
REL	Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m ³ *inhalable 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:**
Keep away from foodstuffs, beverages and feed.
Be sure to clean skin thoroughly after work and before breaks.
 - **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:**
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
 - **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.



Chemical resistant gloves

(Contd. on page 4)

Safety Data Sheet acc. to OSHA HCS

Printing date 06/14/2017

Reviewed on 06/14/2017

Trade name: EP1295 Black A

(Contd. of page 3)

- **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:** Liquid
- **Color:** Black
- **Odor:** Characteristic
- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.

- **Flash point:** >93 °C (>199 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** Not determined.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Not determined.

- **Explosion limits:**

- **Lower:** Not determined.
- **Upper:** Not determined.

- **Vapor pressure:** Not determined.

- **Vapor Density:** not determined

- **Density at 20 °C (68 °F):** 1.5 g/cm³ (12.518 lbs/gal)

- **Vapor density:** Not applicable.

- **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with**

- **Water:** Not miscible or difficult to mix.

- **Viscosity:**

- **Dynamic:** Not available.
- **Kinematic:** Not available.
- **VOC content:** 5.3 %

10 Stability and reactivity

- **Reactivity** No further relevant information available.

- **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** In contact with incompatible materials.

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

- **Incompatible materials:**

Oxidizing agents
Bases (Alkalis)
Strong reducing agents
Mercaptans
Acids

- **Hazardous decomposition products:** Possible in traces.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Not a classified acute oral hazard.

21645-51-2 Aluminum hydroxide

Oral	LD50	(rat) (LD0(OECD TG 401)>5000mg/kg: no death occurred)
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(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/14/2017

Reviewed on 06/14/2017

Trade name: EP1295 Black A

(Contd. of page 4)

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 as a wetted form)
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)
68333-79-9 Ammonium Polyphosphate		
Oral	LD50	5625 mg/kg (rat) LD0 (OECD TG 425) ≥ 2000mg/kg; no death occurred. All animals survived, gained weight and appeared active and healthy throughout the study period. Reference: SIDS Dossier (2007).
Dermal	LD50	(rat) (LD0 (OECD TG 402) ≥ 5000mg/kg; no death occurred) All animals survived, gained weight and appeared active and healthy throughout the study period. Reference: SIDS Dossier (2007).
Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected due to wetted form)
68609-97-2 Alkyl (C12, C14) glycidyl ether		
Oral	LD50	26800 mg/kg (rat) (Male rats; By calculation from 30.1 ml/kg)
Dermal	LD50	(Test species: n/a) (Toxicity not expected based on acute oral data)
Inhalative	LC50/4 h	(rat) (Non-toxic; LC50 exceeded the saturated vapor value)
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)

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

- **Primary irritant effect:**

cough

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)**

1333-86-4 Carbon black

2B

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

21645-51-2 Aluminum hydroxide

EC50 not irritating mg/kg (rabbit) (OECD TG 404; semiocclusive; 4hr-contact; undiluted)

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

EC50 irritating mg/kg (rabbit)

68333-79-9 Ammonium Polyphosphate

EC50 not irritation mg/kg (rabbit) (24hr-contact; Draize score: 0 (Max. 8))

The substance caused slight irritation in an FDA-Richtlinie test; another study using 90% concentrated substance led no irritating effects. Meanwhile, it was not irritating through an 24-hr exposure in rabbits. When considering the weight of all evidence, the substance was not determined to be irritating to rabbit skin.

Reference: IUCLID Dataset (2000).

68609-97-2 Alkyl (C12, C14) glycidyl ether

EC50 moderately mg/kg (rabbit) (EPA OTS 798.4470)

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).

- **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.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/14/2017

Reviewed on 06/14/2017

Trade name: EP1295 Black A



· **Other adverse effects** No further relevant information available.

(Contd. of page 5)

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
 - **Recommendation:** Dispose of according to your local waste regulations.

14 Transport information

· UN-Number	not regulated
· DOT	UN3082
· IMDG, IATA	
· UN proper shipping name	not regulated
· DOT	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
· IMDG, IATA	N.O.S. (Bisphenol-A-(epichlorohydrin) epoxy resin, Triarylphosphate isopropylated)
· Transport hazard class(es)	
· DOT	not regulated
· Class	
· IMDG, IATA	
	
	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9
· Packing group	not regulated
· DOT	III
· IMDG, IATA	
· Environmental hazards:	Product contains environmentally hazardous substances: Triarylphosphate isopropylated, Bisphenol-A-(epichlorohydrin) epoxy resin
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Danger code (Kemler):	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· 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, TRIARYLPHOSPHATE ISOPROPYLATED), 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	25-30%
15625-89-5	1,1,1-trimethylolpropane triacrylate	A, R	5-<10%
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

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/14/2017

Reviewed on 06/14/2017

Trade name: EP1295 Black A

(Contd. of page 6)

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

1333-86-4 Carbon black

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.

· **TLV (Threshold Limit Value established by ACGIH)**

1333-86-4 Carbon black

A4

· **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:**

All ingredients are listed.

· **GHS label elements** GHS label elements

· **National regulations:**

· **Japanese Existing and New Chemical Substance List:**

21645-51-2 Aluminum hydroxide

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

68333-79-9 Ammonium Polyphosphate

68609-97-2 Alkyl (C12, C14) glycidyl ether

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

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

1333-86-4 Carbon black

· **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.

· **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** 06/14/2017 / 1

· *** Data compared to the previous version altered.**