Safety Data Sheet
acc. to OSHA HCS

Printing date 08/14/2018 Reviewed on 08/14/2018

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1 Identification

· **Product identifier**

· **Trade name: EP1121 CLEAR A**
· **Recommended use** Epoxy Resin
· **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)

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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, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
· **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.
Wear protective gloves / 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.
Wash contaminated clothing before reuse.
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%

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/14/2018 Reviewed on 08/14/2018

Trade name: EP1121 CLEAR A

(Contd. of page 1)

CAS: 74398-71-3 EC number: 616-085-8	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid Skin Sens. 1, H317	20-30%

· **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.

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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 all contaminated clothing and wash before reuse.
If skin rash or irritation occurs, seek medical advice.
· **After eye contact:**
Rinse opened eye for several minutes under running water.
Remove contact lenses if present and easy to do so; continue rinsing.
If symptoms develop seek medical attention.
· **After swallowing:**
If victim is unconscious; never give anything by mouth.
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.

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5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
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:
Phenolics
Carbon dioxide (CO_2) and Carbon monoxide (CO)
· **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.
· **Additional information**
Aluminum reacts exothermically with water, acids and alkalis to produce hydrogen gas. Close containers may rupture when exposed to heat.

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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.
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.

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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.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 2)

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.

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8 Exposure controls/personal protection

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **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
· **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.

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
· **Form:**	Liquid
· **Color:**	Clear
· **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:**	>93 °C (>199.4 °F)
· **Flammability (solid, gaseous):**	Not determined.
· **Ignition temperature:**	Not determined.
· **Auto igniting:**	Not determined.
· **Danger of explosion:**	Product does not present an explosion hazard.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 3)

· **Explosion limits:**
· **Lower:** Not determined.
· **Upper:** Not determined.

· **Vapor pressure:** Not determined.
· **Vapor Density:** not determined

· **Density at 20 °C (68 °F):** 1.12 g/cm³ (9.35 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

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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 (Alkalis)
· **Hazardous decomposition products:**
Possible in traces.
Refer to section 5.

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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)
74398-71-3 1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	mg/l (Test species: n/a) (Toxicity not expected based on the 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)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

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12 Ecological information

· **Persistence and degradability** No further relevant information available.
· **Other information:** The product is easily biodegradable.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No data available.

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Trade name: EP1121 CLEAR A

(Contd. of page 4)

· **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.

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14 Transport information

· **UN-Number**	
· **DOT**	Not regulated in packages less than 5L.
· **IMDG, IATA**	UN3082
· **UN proper shipping name**	
· **DOT**	not regulated
· **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**	
· **Class**	Not regulated in packages less than 5L.
· **IMDG, IATA**	
· **Class**	9 Miscellaneous dangerous substances and articles
· **Label**	9
· **Packing group**	
· **DOT**	Not regulated in packages less than 5L.
· **IMDG, IATA**	III
· **Environmental hazards:**	Product contains environmentally hazardous substances: 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:**	
· **DOT**	
· **Remarks:**	Not regulated in packages less than 5L.
· **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

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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.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 5)

· **SARA Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

· **Section 311/312 (Hazardous Chemical Inventory reporting)**

· **SARA Section 311/312 (Hazardous Chemical Inventory Reporting)**

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin	A, C	60-70%
74398-71-3	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid	A, C	20-30%

· **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 8 (b) Inventory:**
All ingredients are listed.

· **TSCA new (21st Century Act)**

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin	ACTIVE/EXEMPT
74398-71-3	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid	ACTIVE/EXEMPT

· **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.

· **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**
· **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.

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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** 08/14/2018 / 2
· *** Data compared to the previous version altered.**