

Printing date 08/17/2017 Reviewed on 08/17/2017

1 Identification

· Product identifier

Trade name: EP1218 Clear B
 Application of the substance / the mixture Epoxy Hardener

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Manufacturer/Supplier.
ResinLab, LLC
N109 W13300 Ellsworth Drive
Germantown, WI 53022
1-877-259-1669

Information Department: Product Safety Department: msds@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 Corr. 1B H314 Causes severe skin burns and eye damage.

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 kidneys, the liver and the muscles through prolonged or repeated exposure. Route of

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

Hazard pictograms







GHS05

GHS07

GHS08

Signal word Danger

Hazard-determining components of labeling:

Poly(oxypropylene)diamine 4-Nonylphenol, branched Bisphenol A

1,4-Bis(aminocyclohexyl)methane **Hazard statements** H314 Causes severe skin burns and eye damage.

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to the kidneys, the liver and the muscles through prolonged or repeated exposure. Route of exposure:
Oral.

Orál.

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 / eye protection / face protection.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
IF exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.

Get medical advice/attention if you feel unwell.
If skin irritation or rash occurs: 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)



Health = *3Fire = 1Reactivity = 0

(Contd. on page 2)



Printing date 08/17/2017 Reviewed on 08/17/2017

Trade name: EP1218 Clear B

(Contd. of page 1)

Other hazards

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

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Dangerous components:				
CAS: 9046-10-0	Poly(oxypropylene)diamine	Skin Corr. 1C, H314: Eye Dam. 1, H318 Aquatic Chronic 2, H411 Aquatic Acute 3, H402	50-60%	
CAS: 84852-15-3 EINECS: 284-625-5 Index number: 601-053-00-8	4-Nonylphenol, branched	Repr. 2, H361 Skin Corr. 1B, H314; Eye Dam. 1, H318 Aquatic Chronic 1, H410 Acute Tox. 4, H302	10-20%	
CAS: 80-05-7 EINECS: 201-245-8 Index number: 604-030-00-0 RTECS: SL 6300000	Bisphenol A	Repr. 2, H361 Eye Dam. 1, H318 Skin Sens. 1, H317; STOT SE 3, H335	≥3-≤5%	
CAS: 1761-71-3 EINECS: 217-168-8	1,4-Bis(aminocyclohexyl)methane	STOT RE 2, H373 Skin Corr. 1B, H314 Aquatic Chronic 2, H411 Acute Tox. 4, H302; Skin Sens. 1, H317	2.5-5%	
CAS: 25322-69-4 NLP: 500-039-8	Polypropylene glycol		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. Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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 remove all contaminated clothing.
Immediately wash with water and soap and rinse thoroughly.
Seek medical advice.

After eye contact:

Rinse opened eye for 10-15 minutes under running water. Then consult a doctor. Remove contact lenses if present and easy to do so; continue rinsing. Do not put any ointments, oils or medication in eyes without specific instructions.

Get medical áttention.

After swallowing:

If victim is unconscious; never give anything by mouth.

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

Do NOT induce vomiting.

Seek immediate medical advice.

If vomiting occurs spontaneously, keep victim's head below hips to prevent aspiration of liquid into lungs.

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
 Carbon dispide.

Carbon dioxide

Fire-extinguishing powder water fog Water spray

Special hazards arising from the substance or mixture Will not burn unless preheated.
In case of fire, the following can be released:
May generate ammonia gas.
Aldehydes
Nitrogen oxides
Corbon dioxide (CO) and Corbon monoxide (CO)

Carbon dioxide (CO₂) and Carbon monoxide (CO)

(Contd. on page 3)





Printing date 08/17/2017 Reviewed on 08/17/2017

Trade name: EP1218 Clear B

(Contd. of page 2)

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

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

Mount respiratory protective device. Wear protective equipment. Keep unprotected persons away. 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 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.

For small spins, vertilate and wash area. Collect spins and absorbant material in appropriate to Ensure adequate ventilation.

Allow molten product to cool.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent if necessary.

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.
Open and handle receptacle with care.
Prevent formation of aerosols.
Keep away from incompatible material(s).

Avoid any release into the environment.

Avoid any felease 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:

84852-15-3 4-Nonylphenol, branched

TEEL-1 Short-term value: 20 mg/m³ TEEL-2 Short-term value: 125 mg/m3

TEEL-3 Short-term value: 500 mg/m³

25322-69-4 Polypropylene glycol

TEEL-1 Short-term value: 30 mg/m3

TEEL-2 Short-term value: 200 mg/m³

TEEL-3 Short-term value: 500 mg/m³

· 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

Sufficient ventilation in pattern and volume should be provided in order to maintain an estimate the provided in order to maintain an 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 (Contd. on page 4)

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(Contd. of page 3)

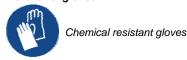


Safety Data Sheet acc. to OSHA HCS

Printing date 08/17/2017 Reviewed on 08/17/2017

Trade name: EP1218 Clear B

Material of 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: Liauid · Color: Amber colored Amine-like Odor: Odor threshold: Not determined. · pH-value: Not determined. · Change in condition Melting point/Melting range: Boiling point/Boiling range: Undetermined. Undetermined · Flash point: >121°C (°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: Vapor Density: Not determined. not determined Density at 20°C (68 °F): Relative density 0.98 g/cm³ (lbs/gal) Not determined Vapor density Not determined. Evaporation rate Not determined. · Solubility in / Miscibility with Partly miscible. Water · Partition coefficient (n-octanol/water): Not determined Viscosity: Dynamic: Kinematic: Not available. Not available. VOC content: 0.0 g/l / 0.00 lb/gl

10 Stability and reactivity

- · Reactivity Not a regulated physical hazard under GHS.
 - · Hazardous Reactivity and Chemical Stability Stable under normal conditions of use, storage and 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 May corrode copper, nickel, zinc and galvanized surfaces.

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

Incompatible materials:

Peroxides Sodium hypochlorite

reactive metals, hydroxyl compounds, organic and mineral acids, oxidizing agents.

Hazardous decomposition products:

Possible in traces. Refer to section 5.

(Contd. on page 5)



Printing date 08/17/2017 Reviewed on 08/17/2017

Trade name: EP1218 Clear B

(Contd. of page 4)

· Additional information:

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

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

If swallowed, may cause:

See acute inhalative effect(s) for further information

9046-10-0 Poly(oxypropylene)diamine
 Oral
 LD50
 2,885 mg/kg (rat)

 Dermal
 LD50
 2,980 mg/kg (rabbit)
 84852-15-3 4-Nonylphenol, branched Oral | LD50 | 1,620 mg/kg (rat)

Dermal LD50 2,031 mg/kg (rat)

80-05-7 Bisphenol A

Oral LD50 3,250 mg/kg (rat) Dermal LD50 3,000 mg/kg (rabbit)

1761-71-3 1,4-Bis(aminocyclohexyl)methane

Oral | LD50 | 380 mg/kg (rat) Dermal LD50 2,110 mg/kg (rabbit)

· Primary irritant effect:

on the eye: Strong caustic effect on skin and mucous membranes.
on the eye: Strong caustic effect.
Sensitization: Sensitization possible through skin contact.
Additional toxicological information:

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

Corrosive Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

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:

Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely 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.

Recommendation: Dispose of according to your local waste regulations.

14 Transport information

UN-Number · DOT, IMDG, IATA UN3267

(Contd. on page 6)



Printing date 08/17/2017 Reviewed on 08/17/2017

Trade name: EP1218 Clear B

(Contd. of page 5) · UN proper shipping name · DOT Corrosive liquid, basic, organic, n.o.s. (Poly(oxypropylene) diamine, 4-Nonylphenol, branched)
CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Poly(oxypropylene)diamine, 4-Nonylphenol, branched), MARINE POLLUTANT
CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Poly(oxypropylene)diamine, 4-Nonylphenol, branched) · IMDG · IATA · Transport hazard class(es) · DOT Class 8 Corrosive substances Label · IMDG Class 8 Corrosive substances Label ·IATA · Class · Label 8 Corrosive substances Packing group
DOT, IMDG, IATA Ш Not applicable. · Environmental hazards: Warning: Corrosive substances 80 F-A,S-B Alkalis · Special precautions for user Danger code (Kemler): EMS Number: Segregation groups Stowage Category Stowage Code SW2 Clear of living quarters. SG35 Stow "separated from" acids. Segregation Code 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: 5 L On cargo aircraft only: 60 L Special marking with the symbol (fish and tree). · Remarks: · IMDG ⋅ Limited quantities (LQ) ⋅ Excepted quantities (EQ) OL Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POLY(OXYPROPYLENE)DIAMINE, 4-NONYLPHENOL BRANCHED), 8, III UN "Model Regulation":

15 Regulatory information	
· Safety, health and environmental regulations/legislation specific for the subs	stance or mixture
· SARA Section 355 (extremely hazardous substances):	
None of the ingredients is listed.	
· SARA Section 313 (Specific toxic chemical listings):	
84852-15-3 4-Nonylphenol, branched	10-20%
80-05-7 Bisphenol A	<i>≥</i> 3- <i>≤</i> 5%
SARA Section 311/312 (Hazardous Chemical Inventory Reporting)	
9046-10-0 Poly(oxypropylene)diamine	A 50-60%
84852-15-3 4-Nonylphenol, branched	A 10-209
	(Contd. on page



Printing date 08/17/2017 Reviewed on 08/17/2017

Trade name: EP1218 Clear B

(Contd. of page 6) | A, C | ≥3-≤5% | | A, C | 2.5-5% | 80-05-7 Bisphenol A 1761-71-3 1,4-Bis(aminocyclohexyl)methane 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): 9046-10-0 Poly(oxypropylene)diamine 84852-15-3 4-Nonylphenol, branched 80-05-7 Bisphenol A 1761-71-3 1,4-Bis(aminocyclohexyl)methane 25322-69-4 Polypropylene glycol 7732-18-5 Water, distilled Proposition 65 · Chemicals known to cause cancer: None of the ingredients is listed. • Chemicals known to cause reproductive toxicity for females: 80-05-7 Bisphenol A Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed · 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: 9046-10-0 Poly(oxypropylene)diamine 84852-15-3 4-Nonylphenol, branched 80-05-7 Bisphenol A 1761-71-3 1,4-Bis(aminocyclohexyl)methane 25322-69-4 Polypropylene glycol 7732-18-5 Water, distilled · GHS label elements GHS label elements · National regulations: Japanese Existing and New Chemical Substance List: 9046-10-0 Poly(oxypropylene)diamine 84852-15-3 4-Nonylphenol, branched 80-05-7 Bisphenol A 1761-71-3 1,4-Bis(aminocyclohexyl)methane 25322-69-4 Polypropylene glycol 7732-18-5 Water, distilled · Korean Existing Chemical Inventory: 9046-10-0 Poly(oxypropylene)diamine 84852-15-3 4-Nonylphenol, branched 80-05-7 Bisphenol A 1761-71-3 1,4-Bis(aminocyclohexyl)methane 25322-69-4 Polypropylene glycol 7732-18-5 Water, distilled · European Pre-registered substances: 9046-10-0 Poly(oxypropylene)diamine 84852-15-3 4-Nonylphenol, branched 80-05-7 Bisphenol A 1761-71-3 1,4-Bis(aminocyclohexyl)methane 25322-69-4 Polypropylene glycol 7732-18-5 Water, distilled · EINECS List: 84852-15-3 4-Nonylphenol, branched 80-05-7 Bisphenol A 1761-71-3 1,4-Bis(aminocyclohexyl)methane 7732-18-5 Water, distilled (Contd. on page 8)





Printing date 08/17/2017 Reviewed on 08/17/2017

Trade name: EP1218 Clear B

	(Contd. of page 7)
· ELINCS List:	
None of the ingredients is listed.	
· REACh - Substances of Very High Concern (SVHC) List:	
84852-15-3 4-Nonylphenol, branched	10-20%
80-05-7 Bisphenol A	<i>≥</i> 3- <i>≤</i> 5%
· 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 08/17/2017 / 5
 * Data compared to the previous version altered.