

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Printing date 01/21/2015 Reviewed on 01/16/2015

1 Identification

- · Product identifier
- · Trade name: EP100 Seal Component B
- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Product description Low viscosity epoxy resin
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

E-Chem, LLC

4102 El Rey Rd. SE

Albuquerque, NM 87105 Phone: 505.217.2121

Fax: 505.217.3721

Email: mail@e-chem.net Web: www.e-chem.net

· Emergency telephone number:

Chemtrec at 1-800-424-9300 24 Hours

Outside the U.S., call Chemtrec collect at 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

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).

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Hazard pictograms









GHS05 GHS07 GHS08 GHS09

· Signal word Danger

· Hazard-determining components of labeling:

4-nonviphenol, branched

2-piperazin-1-ylethylamine

2,4,6-tris(dimethylaminomethyl)phenol

4,4'-methylenebis(cyclohexylamine)

· Hazard statements

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

· Precautionary statements

Do not breathe dusts or mists.

Wear protective gloves.

Wear eye protection / face protection.

Avoid release to the environment.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

If swallowed: Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Collect spillage.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Unknown acute toxicity:

94 percent of the mixture consists of ingredient(s) of unknown toxicity.

- · Classification system:
- NFPA ratings (scale 0 4)



Health = 3 Fire = 1 Reactivity = 0



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· HMIS-ratings (scale 0 - 4)



· Other hazards None known

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous Compoi	nents:	
CAS: 84852-15-3	4-nonylphenol, branched ♣ Repr. 2, H361; ♠ Skin Corr. 1B, H314; ♠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ♠ Acute Tox. 4, H302	≥85%
CAS: 90-72-2	2,4,6-tris(dimethylaminomethyl)phenol Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	2-12%
CAS: 140-31-8 RTECS: TK 8050000	2-piperazin-1-ylethylamine Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; H227; Aquatic Chronic 3, H412	2-12%
CAS: 9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether) Skin Corr. 1A, H314; Eye Dam. 1, H318; H402; Aquatic Chronic 3, H412	2-12%
CAS: 1761-71-3	4,4'-methylenebis(cyclohexylamine) ♦ Acute Tox. 3, H301; ♦ Skin Corr. 1B, H314; Eye Dam. 1, H318	2-12%

4 First-aid measures

- · Description of first aid measures
- · General information:

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:

In case of unconsciousness, place patient securely on side position for transportation.

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- · 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

No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• Special hazards arising from the substance or mixture No further relevant information available.

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· Advice for firefighters

· Protective equipment:

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 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:

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

Use neutralizing agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with skin, eyes and clothing

Avoid breathing fume/gas/mist/vapors/spray.

Do not take internally.

Use personal protection equipment as outlined in section 8.

Open and handle receptacle with care.

Prevent formation of aerosols.

- Information about protection against explosions and fires: Keep protective respiratory device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool, dry place.

Store in a well ventilated place.

- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- Components with occupational exposure limits:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• Additional information: The lists that were valid during the creation were used as basis.

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- · Exposure controls
- · 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.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

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

· Penetration time of glove material

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· Eye protection: Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information

· Appearance:

Form: Liquid

Color:
Odor:
Odor threshold:
Amber colored
Distinctive
Not determined.

PH-value:
Not determined.

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:
Not determined.
Not determined.

Not determined.

Not determined.

Not determined.

Not determined.

Not applicable.

· Ignition temperature:

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. Not determined.

Vapor pressure: Not determined.

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· Density:

Relative density
Vapour density
Not determined.
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: Not determined. **Kinematic:** Not determined.

Solvent content:

Organic solvents: 0.0 %

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability Stable under normal conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

Strong oxidizing agents.

Strong acids, strong bases

· Hazardous decomposition products: Carbon dioxide, carbon monoxide and nitrogen oxides.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50	· LD/LC50 values that are relevant for classification:					
9046-10-0	9046-10-0 Poly(propylene glycol) bis(2-aminopropyl ether)					
Oral	LD50	2885.3 mg/kg (rat)				
Dermal	LD50	2980 mg/kg (rabbit) Skin - rabbit - Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days OECD Test Guideline 404.				
Inhalative	LC50/4 h	>0.74 mg/l (rat) (8 hours)				

- · Primary irritant effect:
- on the skin:

Strong caustic effect on skin and mucous membranes.

May cause an allergic skin reaction.

on the eye:

Strong irritant with the danger of severe eye injury.

Corrosive effect.

Causes serious eye irritation.

· Sensitization: Sensitization possible through skin contact.

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· Additional toxicological information:

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

Harmful

Corrosive

Irritant

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

· Carcinogenic categories

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to humans

Group 2A - Probably carcinogenic to humans

Group 2B - Possibly carcinogenic to humans

Group 3 - Not classifiable as to its carcinogenicity to humans

Group 4 - Probably not carcinogenic to humans

· NTP (National Toxicology Program)

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity:

Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Ecotoxical effects:
- · Remark: Very toxic for fish
- · Additional ecological information:
- 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.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

- Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation:

It is the generators responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state and federal environmental regulations.

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UN1760

Corrosive liquids, n.o.s. (4-nonylphenol, branched)

ENVIRONMENTALLY HAZARDOUS

MARINE POLLUTANT

8 Corrosive substances

8 (C9) Corrosive substances

UN1760 Corrosive liquids, n.o.s. (4-nonylphenol, branched),

CORROSIVE LIQUID, N.O.S. (4-nonylphenol, branched),

CORROSIVE LIQUID, N.O.S. (4-nonylphenol, branched)

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Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

4 Transport information

· UN-Number

· DOT, ADR, IMDG, IATA

UN proper shipping name

· DOT

· ADR

· IMDG

· IATA

· Transport hazard class(es)

· DOT





· Class

· Label · ADR





· Class

· Label

· IMDG





· Class · Label

·IATA



· Class

· Label · Packing group

· DOT, ADR, IMDG, IATA

8 Corrosive substances

8 Corrosive substances

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· Environmental hazards: Product contains environmentally hazardous substances: 4-

nonylphenol, branched

· Marine pollutant: Yes

Symbol (fish and tree)

· Special marking (ADR): Symbol (fish and tree) Warning: Corrosive substances

Danger code (Kemler): · EMS Number: F-A,S-B

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· Special precautions for user

· DOT

Quantity limitations On passenger aircraft/rail: 1 L

On cargo aircraft only: 30 L

Special marking with the symbol (fish and tree). · Remarks:

· ADR

· Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· IMDG

1L · Limited quantities (LQ)

Code: E2 · Excepted quantities (EQ)

> Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation": UN1760, Corrosive liquids, n.o.s. (4-nonylphenol, branched),

ENVIRONMENTALLY HAZARDOUS, 8, II

5 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

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· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients are listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

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

None of the ingredients are listed.

· GHS label elements

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

· Hazard pictograms









GHS05 GHS07 GHS08 GHS09

· Signal word Danger

· Hazard-determining components of labeling:

4-nonylphenol, branched

2-piperazin-1-ylethylamine

2,4,6-tris(dimethylaminomethyl)phenol

4,4'-methylenebis(cyclohexylamine)

· Hazard statements

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

· Precautionary statements

Do not breathe dusts or mists.

Wear protective gloves.

Wear eye protection / face protection.

Avoid release to the environment.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

If swallowed: Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If swallowed: Rinse mouth. Do NOT induce vomiting.



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Collect spillage.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

CAS: 84852-15-3	4-nonylphenol, branched	≥85%
	Repr. 2, H361; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	-
CAS: 90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	2-12%
	♠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
CAS: 140-31-8	2-piperazin-1-ylethylamine	2-12%
RTECS: TK 8050000	Skin Corr. 1B, H314;	
CAS: 9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	2-12%
	Skin Corr. 1A, H314; Eye Dam. 1, H318; H402; Aquatic Chronic 3, H412	
CAS: 1761-71-3	4,4'-methylenebis(cyclohexylamine)	2-12%
	♦ Acute Tox. 3, H301; ♦ Skin Corr. 1B, H314; Eye Dam. 1, H318	

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

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- · Date of preparation / last revision 01/21/2015 / 2
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

: Flammable liquids, Hazard Category 4

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Repr. 2: Reproductive toxicity, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

: Hazardous to the aquatic environment - AcuteHazard, Category 3





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Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.

SDS created by MSDS Authoring Services www.msdsauthoring.com (877) 204-9106