

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

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

1 Identification

- · Product identifier
- · Trade name: EP-PATCH Component A
- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · **Product description** Epoxy patching mortar
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

E-Chem, LLC

2944 William Street SE Albuquerque, NM 87102 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

Muta. 2 H341 Suspected of causing genetic defects.



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

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 GHS08 GHS09

- · Signal word Warning
- · Hazard-determining components of labeling:

Epoxy resin



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2,3-epoxypropyl o-tolyl ether

oxirane, mono[(C12-14-alkyloxy)methyl] derivs

Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

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

Wear protective gloves.

Wear eye protection / face protection.

Avoid release to the environment.

Wash thoroughly after handling.

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

Continue rinsing.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

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.

If on skin: Wash with plenty of water.

Collect spillage.

Take off contaminated clothing and wash it before reuse.

Store locked up.

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

Unknown acute toxicity:

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

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



Health = 2 Fire = 1

Reactivity = 0

HMIS-ratings (scale 0 - 4)



2 Health = 2

Fire = 1

Other hazards None known

Composition/information on ingredients

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

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· Dangerous Components:		
25068-38-6	Epoxy resin	70-90%
	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs ♦ Skin Irrit. 2, H315; Skin Sens. 1, H317	15-35%
2210-79-9	2,3-epoxypropyl o-tolyl ether Muta. 2, H341; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	2-12%

4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

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

· 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 at least 15 minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Seek medical treatment.
- · 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.
- 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

Ensure adequate ventilation

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:

Ensure adequate ventilation.

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

Dispose contaminated material as waste according to section 13.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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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

Do not take internally.

Use personal protection equipment as outlined in section 8.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- 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.
- · 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.

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:



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.

Eve protection: Tightly sealed goggles

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid Clear
Odor: Mild

Odor threshold: Not determined.pH-value: Not determined.

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:Not determined.
218 °C (424 °F)Flash point:150 °C (302 °F)Flammability (solid, gaseous):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.

Upper: Not determined.

Vapor pressure: Not determined.

• **Density** @ **20** °**C** (**68** °**F**): 1.17 g/cm³ (9.764 lbs/gal)

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 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 % Solids content: 80.0 %

• 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.

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- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

Strong oxidizing agents.

Strong acids, strong bases

· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin:

Irritant to skin and mucous membranes.

May cause an allergic skin reaction.

on the eye:

Irritating effect.

Causes serious eye irritation.

- · 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 are listed.

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: Toxic for fish
- · Additional ecological information:
- · 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.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms



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- · 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:

Do not allow product to reach sewage system.

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.

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

14 Transport information

· UN-Number

· **DOT** Non-Regulated Material

· ADR, IMDG, IATA UN3082

· UN proper shipping name

· **DOT** Non-Regulated Material

· ADR UN3082 Environmentally hazardous substances, liquid, n.o.s. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S., MARINE POLLUTANT

· IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

· Transport hazard class(es)

· DOT

· Class Non-Regulated Material

· ADR, IMDG, IATA



· Class 9 Miscellaneous dangerous substances and articles

· Label

Packing group

· **DOT** Non-Regulated Material

· ADR, IMDG, IATA

· Environmental hazards:

· Marine pollutant: Yes

Symbol (fish and tree)
Special marking (ADR):
Special marking (IATA):
Symbol (fish and tree)
Symbol (fish and tree)

• Special precautions for user Warning: Miscellaneous dangerous substances and articles

· **EMS Number:** F-A,S-F

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

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· Transport/Additional information:

· ADR

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

• UN "Model Regulation": UN3082, Environmentally hazardous substances, liquid, n.o.s.,

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 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.

- · 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







GHS07 GHS08 GHS09

· Signal word Warning



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· Hazard-determining components of labeling:

Epoxy resin

2.3-epoxypropyl o-tolyl ether

oxirane, mono[(C12-14-alkyloxy)methyl] derivs

Hazard statements

Causes skin irritation.

Causes serious eve irritation.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

Toxic to aquatic life with long lasting effects.

Precautionary statements

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

Wear protective gloves.

Wear eye protection / face protection.

Avoid release to the environment.

Wash thoroughly after handling.

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

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

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

If eve irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Collect spillage.

Take off contaminated clothing and wash it before reuse.

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.

25068-38-6	Epoxy resin	70-90%
	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs	15-35%
	♦ Skin Irrit. 2, H315; Skin Sens. 1, H317	-
2210-79-9	2,3-epoxypropyl o-tolyl ether	2-12%
	Muta. 2, H341; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	

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

6 Other information





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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)

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

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

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

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

Muta. 2: Germ cell mutagenicity, Hazard Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

* * Data compared to the previous version altered.

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1 Identification

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

No further relevant information available.

- · Product description Epoxy Patching Mortar
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

E-Chem, LLC

2944 William Street SE Albuquerque, NM 87102 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



GHS06 Skull and crossbones

Acute Tox. 2 H330 Fatal if inhaled.



GHS08 Health hazard

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



GHS05 Corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



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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Trade name: EP-PATCH Component B

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Hazard pictograms









GHS05 GHS06 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

Poly(propylene glycol) bis(2-aminopropyl ether)

3,6,9-triazaundecamethylenediamine

4-nonylphenol, branched

2,4,6-tris(dimethylaminomethyl)phenol

· Hazard statements

Harmful if swallowed.

Fatal if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

Do not breathe dusts or mists.

Wear respiratory protection.

Use only outdoors or in a well-ventilated area.

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 is urgent (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.

Store in a well-ventilated place. Keep container tightly closed.

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

· Unknown acute toxicity:

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

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Trade name: EP-PATCH Component B

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



Health = 4Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



*4 Health = *4 Fire = 1

Other hazards None known

Composition/information on ingredients

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

· Dangerous	Components:	
9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	60-90%
	♦ Skin Corr. 1A, H314; Eye Dam. 1, H318; H402; Aquatic Chronic 3, H412	-
112-57-2	3,6,9-triazaundecamethylenediamine	2-12%
	Skin Corr. 1B, H314; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	
84852-15-3	4-nonylphenol, branched	2-12%
	Repr. 2, H361; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	
	2,4,6-tris(dimethylaminomethyl)phenol	2-12%
	♦ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	

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.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

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

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eve contact: Rinse opened eve 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.

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Trade name: EP-PATCH Component B

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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.
- 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.

Ensure adequate ventilation

· Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Use neutralizing agent.

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

Dispose contaminated material as waste according to section 13.

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.

Open and handle receptacle with care.

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.

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.

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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:

112-57-2 3,6,9-triazaundecamethylenediamine

WEEL Long-term value: 5 mg/m³

Skin; DSEN

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

• Flash point:

• Flammability (solid, gaseous):

• Ignition temperature:

Not determined.
232 °C (450 °F)

128 °C (262 °F)

Not applicable.

240 °C (464 °F)

(Contd. on page 6)



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

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· **Decomposition temperature:** Not determined.

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

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

Lower: 0.7 Vol % **Upper:** 5.0 Vol %

· Vapor pressure: Not determined.

· Density:

Relative densityNot determined.Vapour densityNot determined.Evaporation rateNot determined.

· Solubility in / Miscibility with

Water: Fully miscible.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 Stabilitv and reactivitv

- · 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)					

(Contd. on page 7)



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112-57-2 3,6,9-triazaundecamethylenediamine

Dermal LD50 660 mg/kg (rabbit)

· 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 eve irritation.

- Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:

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

Harmful

Corrosive

Irritant

Very toxic

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: 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.

(Contd. on page 8)



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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:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number

· DOT, ADR, IMDG, IATA

· UN proper shipping name

· DOT · ADR Corrosive liquids, toxic, n.o.s.

UN2922 Corrosive liquids, toxic, n.o.s. (Poly(propylene glycol) bis(2-aminopropyl ether), 4-nonylphenol, branched),

ENVIRONMENTALLY HAZARDOUS

· IMDG CORROSIVE LIQUID, TOXIC, N.O.S. (Poly(propylene glycol)

bis(2-aminopropyl ether), 4-nonylphenol, branched), MARINE

POLLUTANT

UN2922

CORROSIVE LIQUID, TOXIC, N.O.S.

· IATA

· Transport hazard class(es)

· DOT



· Class 8 Corrosive substances

· **Label** 8. 6.1

· ADR



· Class 8 (CT1) Corrosive substances

Label 8+6.1

· IMDG



• Class 8 Corrosive substances

(Contd. on page 9)



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8/6.1

Trade name: EP-PATCH Component B

(Contd. of page 8)

· Label

· IATA



· Class 8 Corrosive substances

· **Label** 8 (6.1)

· Packing group

· DOT, ADR, IMDG, IATA

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

nonylphenol, branched

· Marine pollutant: Yes

Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)

· Special precautions for user Warning: Corrosive substances

Danger code (Kemler):EMS Number:Segregation groups86F-A,S-BAlkalis

· 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

· ADR

· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· 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": UN2922, Corrosive liquids, toxic, n.o.s. (Poly(propylene glycol)

bis(2-aminopropyl ether), 4-nonylphenol, branched),

ENVIRONMENTALLY HAZARDOUS, 8 (6.1), 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 are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

(Contd. on page 10)



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Trade name: EP-PATCH Component B

(Contd. of page 9)

· 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.

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 GHS06 GHS08 GHS09

· Signal word Danger

Hazard-determining components of labeling:

Poly(propylene glycol) bis(2-aminopropyl ether)

3,6,9-triazaundecamethylenediamine

4-nonylphenol, branched

2,4,6-tris(dimethylaminomethyl)phenol

· Hazard statements

Harmful if swallowed.

Fatal if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

Toxic to aquatic life with long lasting effects.

Precautionary statements

Do not breathe dusts or mists.

Wear respiratory protection.

Use only outdoors or in a well-ventilated area.

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.



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Trade name: EP-PATCH Component B

(Contd. of page 10)

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 is urgent (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.

Store in a well-ventilated place. Keep container tightly closed.

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.

9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	60-90%
	♦ Skin Corr. 1A, H314; Eye Dam. 1, H318; H402; Aquatic Chronic 3, H412	
112-57-2	3,6,9-triazaundecamethylenediamine	2-12%
	♦ Skin Corr. 1B, H314; ♦ Aquatic Chronic 2, H411; ♦ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	
34852-15-3	4-nonylphenol, branched	2-12%
	Repr. 2, H361; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	2-12%
	① Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	

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)



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LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4 Acute Tox. 2: Acute toxicity, Hazard Category 2

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

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

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.

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

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1 Identification

- · Product identifier
- · Trade name: EP PATCH Component C
- · CAS Number:

14808-60-7

· EC number:

238-878-4

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Product description Epoxy Patching Mortar
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

E-Chem. LLC

2944 William Street SE Albuquerque, NM 87102

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

Carc. 1A H350 May cause cancer.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

STOT SE 3 H335 May cause respiratory irritation.

Eye Irrit. 2B H320 Causes eye irritation.

- · Label elements
- GHS label elements

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

· Hazard pictograms





GHS07 GHS08

· Signal word Danger

(Contd. on page 2)



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

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Trade name: EP PATCH Component C

(Contd. of page 1)

· Hazard-determining components of labeling:

Quartz (SiO2)

· Hazard statements

Harmful if inhaled.

Causes eye irritation.

May cause cancer.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

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

Obtain special instructions before use.

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

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

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

Call a poison center/doctor if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

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

· Unknown acute toxicity:

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

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



Health = 3 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *3 Fire = 0 Reactivity = 0

· Other hazards None known

3 Composition/information on ingredients

· Chemical characterization: Substances

· CAS No. Description

14808-60-7 Quartz (SiO2)

· Identification number(s)

EC number: 238-878-4

(Contd. on page 3)



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(Contd. of page 2)

4 First-aid measures

· Description of first aid measures

· General information:

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

· After inhalation:

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

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

· After skin contact:

Wash areas with soap and water.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If swallowed and symptoms occur, consult 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.
- Advice for firefighters
- · Protective equipment:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Refer to section 8

- · Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:

Powder and fragments should be cleaned up using a method that will avoid the generation of dust in the workplace atmosphere. The use of a vacuum cleaner fitted with an exhaust air filter fine enough to trap the dust is recommended.

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

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.



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(Contd. of page 3)

· Information about protection against explosions and fires:

Avoid dust formation and control ignition sources.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- 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:

14808-60-7 Quartz (SiO2)

PEL see Quartz listing

REL Long-term value: 0.05* mg/m³

*respirable dust; See Pocket Guide App. A

TLV Long-term value: 0.025* mg/m³

*as respirable fraction

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

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- 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.

Eve protection: Tightly sealed goggles

9 Physical and chemical properties

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

Form: Powder Color: White Odorless

· Odor threshold: Not determined.

(Contd. on page 5)



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

Trade name: EP PATCH Component C

(Contd. of page 4)

· **pH-value:** Not applicable.

· Change in condition

Melting point/Melting range: 1713 °C (3115 °F)
 Boiling point/Boiling range: Not determined.
 Flash point: Not applicable.

• Flammability (solid, gaseous): Product is not flammable.

· Ignition temperature:

Decomposition temperature: Not determined.

• Auto igniting: Not determined.

• Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.Upper: Not determined.Vapor pressure: Not applicable.

• **Density @ 20 °C (68 °F):** 2.2 g/cm³ (18.359 lbs/gal)

Bulk density @ 20 °C (68 °F):
 Relative density
 Vapour density
 Evaporation rate
 1400 kg/m³
 Not determined.
 Not applicable.
 Not applicable.

· Solubility in / Miscibility with

Water: Insoluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable.

Organic solvents: 0.0 %
Solids content: 100.0 %

· 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: Hydrogen Fluoride
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritating effect.

(Contd. on page 6)



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

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Trade name: EP PATCH Component C

(Contd. of page 5)

on the eye:

Irritating effect.

Causes serious eye irritation.

- · Additional toxicological information:
- Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
14808-60-7 Quartz (SiO2)	1
· NTP (National Toxicology Program)	
14808-60-7 Quartz (SiO2)	K
· OSHA-Ca (Occupational Safety & Health Administration)	
Substance is not listed.	

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · 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.
- Additional ecological information:
- · General notes: Generally not hazardous for water
- 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:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

14 Transport information

· UN-Number

· DOT, ADR, ADN, IMDG, IATA Non-Regulated Material

UN proper shipping name

· DOT, ADR, ADN, IMDG, IATA Non-Regulated Material

· Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA

· Class Non-Regulated Material

· Packing group

· **DOT, ADR, IMDG, IATA** Non-Regulated Material

Environmental hazards:

· Marine pollutant: No

· Special precautions for user Not applicable.

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

(Contd. on page 7)



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(Contd. of page 6)

· UN "Model Regulation":

15 Regulatory information

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

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

- Proposition 65
- · Chemicals known to cause cancer:

Substance is listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

14808-60-7 Quartz (SiO2)

A2

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

Substance is listed.

· GHS label elements

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

· Hazard pictograms





GHS07 GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Quartz (SiO2)

· Hazard statements

Harmful if inhaled.

Causes eye irritation.

May cause cancer.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure.



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Trade name: EP PATCH Component C

(Contd. of page 7)

· Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

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

Obtain special instructions before use.

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

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

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

Call a poison center/doctor if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

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

· National regulations:

Substance is not listed.

· State Right to Know

Substance is not listed.

· 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 / 3

· 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

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Acute Tox. 4: Acute toxicity, Hazard Category 4

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

Carc. 1A: Carcinogenicity, Hazard Category 1A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

* Data compared to the previous version altered.

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