



301144, 2122 EPOXY PUTTY, HARDENER COMPONENT

MATERIAL SAFETY DATA SHEET

Rev 4
18/04/11

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: EPOXY PUTTY 2122 HARDENER

Product code: 301144

Product use: The hardener component of a high quality structural adhesive filler used for cable joint sealing and filling, to be used with the resin component.

Company name: CMP Products
Glasshouse Street
St. Peters
Newcastle upon Tyne
NE6 1BS, England

MSDS Contact: Tel. no. +44-(0)191-265-7411

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Harmful.

Most important hazards

Harmful if swallowed.

Symptoms of Exposure

Inhalation

May cause irritation of respiratory tract.

Skin contact

Contact causes severe skin irritation and possible burns.

Eye contact

Corrosive to the eyes and may cause severe damage including blindness.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients:

2,4,6-TRIS (DIMETHYLAMINOMETHYL) PHENOL

CAS: 90-72-2

EINECS: 202-013-9

1-5%

[Xn];R22 [Xi];R36/38



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4. FIRST AID MEASURES

General advice

Show this safety data sheet to medical personnel. Wash contaminated clothing before re-use.

Inhalation:

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Lie down in the recovery position, cover and keep warm.

Skin contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eyes wide open while rinsing. If eye irritation persists, consult a specialist.

Ingestion:

Do not induce vomiting. Clean mouth with water and afterwards drink plenty of water. If a person vomits when lying on his back, place him in the recovery position

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the substance or mixture

In the event of fire and/or explosion do not breathe fumes. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Use appropriate personal protective equipment.

Environmental precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. Avoid subsoil penetration. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Sweep up and shovel into suitable containers for disposal.



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7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Change out of working clothes and wash hands before breaks and at the end of the working day.

Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Keep tightly closed in a dry and cool place. Keep at temperatures between 5°C and 40°C.

Packaging material

Store in original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls

Engineering measures to reduce exposure

Ensure adequate ventilation, especially in confined areas.

Exposure Limit Values

Personal protective equipment

Respiratory protection

No personal respiratory protective equipment normally required.

Hand protection

Rubber or other plastic material gloves. Gloves should be replaced immediately if signs of degradation are observed.

Eye/face protection

Safety glasses [BS EN 166].

Skin and body protection

Lightweight protective clothing.

Hygiene measures

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing. Change out of working clothes and wash hands before breaks and at the end of the working day. Remove and wash contaminated clothing before re-use.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid.
Appearance:	Viscous brown paste.
Odour:	Ammoniacal.
Odour threshold:	No data found.
Color:	Light brown.
pH:	Not applicable.
Flash point:	Does not flash.
Flammability (solid, gas):	Not applicable
Explosion limits:	
- lower (LEL):	Not applicable.
- upper (UEL):	Not applicable.
Specific gravity (g/cc):	1.85 ± 0.03
Decomposition temperature:	>150°C
Water solubility:	Insoluble.
Viscosity:	Not applicable - material is a solid.
Percent volatile by volume:	0%

10. STABILITY AND REACTIVITY

Reactivity

No reactive hazards known.

Chemical Stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong oxidising agents. Amines.

Hazardous decomposition products

Combustion produces oxides of carbon (COx) including highly poisonous carbon monoxide. Nitrogen oxides (NOx). Sulphur oxides.

11. TOXICOLOGICAL INFORMATION

LETHAL CONCENTRATION & LETHAL DOSE TOXICITY FOR PRODUCT COMPONENTS

2,4,6-TRIS (DIMETHYLAMINOMETHYL) PHENOL, CAS NO 90-72-2

= 1000 mg/kg Oral LD50 Rat

= 1280 mg/kg Dermal LD50 Rat

Sensitisation

No sensitisation responses were observed.

Chronic toxicity

Chronic exposure may cause dermatitis.



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12. ECOLOGICAL INFORMATION

Mobility

The product is insoluble and sinks in water.

Persistence and degradability

Not inherently biodegradable.

Bioaccumulative potential

Taking into consideration the properties of several components, the product is estimated not to be readily biodegradable according to OECD classification.

Ozone depletion potential

No ozone depleting chemicals are present or used in manufacture.

Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods - unused products

Should not be released into the environment. Classified as hazardous waste according to (national equivalent of EC-Dir. 91/689; disposal of toxic and hazardous waste). It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. Use a registered waste disposal company and supply accurate information about the nature of the hazard. Waste disposal number - 08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances..

Waste treatment methods - contaminated packaging

Waste treatment methods - contaminated packaging is classified as hazardous waste. Empty containers should be transported/delivered using a registered waste carrier for local recycling or waste disposal. Waste disposal number – 15 01 08* Packaging containing residues or contaminated by dangerous substances.

14. TRANSPORT INFORMATION

UN Proper shipping name: Not classified as dangerous in the meaning of transport regulations.



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15. REGULATORY INFORMATION

Contains: 2,4,6-TRIS (DIMETHYLAMINOMETHYL) PHENOL

Indication of danger: Xn - Harmful.



R -phrase(s)

R22 - Harmful if swallowed.

S -phrase(s)

S 2 - Keep out of the reach of children.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 - After contact with skin, wash immediately with plenty of soap and water.

SVHC Compliance As can be seen in section 3 this material does not contain any Substance of Very High Concern (SVHC) as determined by the European REACH Regulation 1907/2006/EC in quantities above the reporting threshold.

International Inventories

United States TSCA: All chemicals in this product are listed in the inventory or, are exempt from the inventory as a naturally occurring substances.

Canada DSL: One or more chemicals in this product are not listed in the inventory.

Canada NDSL: One or more chemicals in this product are not listed in the inventory.

Europe EINECS One or more chemicals in this product are not listed in the inventory.

Europe ELINCS: One or more chemicals in this product are not listed in the inventory.

Korea ECL: All chemicals in this product are listed in the inventory.

China Inventory: All chemicals in this product are listed in the inventory.

Australia AICS: One or more chemicals in this product are not listed in the inventory.

Japan ENCS: One or more chemicals in this product are not listed in the inventory.

Philippines PICCS: All chemicals in this product are listed in the inventory.

Legend

TSCA: Toxic Substance Control Act

DSL: Domestic Substance List

NDSL: Non-Domestic Substance List

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: EU List of Notified Chemical Substances

ECL: Existing Chemicals List aka Existing and Evaluated Chemical Substances

AICS: Inventory of Chemical Substances

ENCS: Existing and New Chemical Substances

PICCS: Phillipines Inventory of Chemicals and Chemical Substances



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16. OTHER INFORMATION

Shelf life.

6 month(s). Any unused material should be sealed tightly to avoid any premature curing.

Text of R phrases mentioned in Section 2

- R22 - Harmful if swallowed.
- R36/38 - Irritating to eyes and skin.

Note: This material does not contain any hazardous substances as determined by the European End-of-Life Vehicles (ELV) Directive 2000/53/EC.

This material does not contain any hazardous substances as determined by the European (RoHS) Directive 2002/95/EC.

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: EPOXY PUTTY 2122 RESIN

Product code: 301143

**Relevant identified uses of
the substance or mixture:**

The resin component of a high quality structural adhesive filler used for cable joint sealing and filling, to be used with the hardener component.

Company name: CMP Products
Glasshouse Street
St. Peters
Newcastle upon Tyne
NE6 1BS, England

MSDS Contact: Tel. no. +44-(0)191-265-7411

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Irritant.
Sensitising.

Most important hazards

May cause sensitization by skin contact. Irritating to eyes and skin. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Symptoms of Exposure

Skin contact

Redness. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Eye contact

Moderately irritating to the eyes. Redness. Excessive watering.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients:

BISPHENOL-A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700)

CAS: 25068-38-6 20-40%

[Xi] R36/R38 R43; [N] R51-53

EPOXY PHENOL FORMALDEHYDE RESIN

CAS: 28064-14-4 1-5%

[Xi] R36/R38 R43; [N] R51-53



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4. FIRST AID MEASURES

General advice

Show this safety data sheet to medical personnel. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use.

Inhalation:

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.

Skin contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eyes wide open while rinsing. If eye irritation persists, consult a specialist.

Ingestion:

Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting. If a person vomits when lying on his back, place him in the recovery position.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the substance or mixture

In the event of fire and/or explosion do not breathe fumes. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Specific methods

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Use appropriate personal protective equipment.

Environmental precautions

Should not be released into the environment. Prevent product from entering drains. Avoid subsoil penetration. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Sweep up and shovel into suitable containers for disposal.



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7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Change out of working clothes and wash hands before breaks and at the end of the working day. Keep away from open flames, hot surfaces and sources of ignition.

Conditions for safe storage, including any incompatibilities

Keep at temperatures between 5°C and 35°C. Keep tightly closed in a dry and cool place.

Packaging material

Store in original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure

Ensure adequate ventilation, especially in confined areas.

Exposure Limit Values

Personal protective equipment

Respiratory protection

No personal respiratory protective equipment normally required.

Hand protection

PVC or other plastic material gloves. Gloves should be replaced immediately if signs of degradation are observed.

Eye/face protection

Safety glasses [BS EN 166]. Eye wash bottle with pure water.

Skin and body protection

Lightweight protective clothing.

Hygiene measures

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing. Change out of working clothes and wash hands before breaks and at the end of the working day. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid.
Appearance:	Viscous red paste.
Odour:	Not significant
Odour threshold:	No data found.
Color:	Dark red.



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pH:	Not applicable.
Flash point:	Does not flash.
Flammability (solid, gas):	Not applicable
Explosion limits:	
- lower (LEL):	Not applicable.
- upper (UEL):	Not applicable.
Specific gravity (g/cc):	1.95 ± 0.03
Decomposition temperature:	>200°C
Water solubility:	Insoluble.
Viscosity:	Not applicable - material is a solid.
Percent volatile by volume:	0%

10. STABILITY AND REACTIVITY

Reactivity

No reactive hazards known.

Chemical Stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Polymerisation is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers

Conditions to avoid

To avoid thermal decomposition, do not overheat. Prolonged exposure above 45°C will cause polymer degradation.

Incompatible materials

Oxidizing agents. Acids and bases. Amines.

Hazardous decomposition products

Combustion produces oxides of carbon (COx) including highly poisonous carbon monoxide.

11. TOXICOLOGICAL INFORMATION

LETHAL CONCENTRATION & LETHAL DOSE TOXICITY FOR PRODUCT COMPONENTS

BISPHENOL-A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT ≤ 700),

CAS NO 25068-38-6

= 11400 mg/kg Oral LD50 Rat

EPOXY PHENOL FORMALDEHYDE RESIN, CAS NO 28064-14-4

LD50, LC50

Skin irritation

May cause sensitisation by skin contact.

Eye irritation

May cause eye irritation with susceptible persons.



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Sensitization

May cause sensitisation of susceptible persons by skin contact. Epoxy resins with an average molecular weight of less than 700 may cause sensitisation.

Chronic toxicity

Repeated or prolonged skin contact with the unexposed coating may cause skin irritation and/or dermatitis and sensitisation of susceptible persons.

12. ECOLOGICAL INFORMATION

Mobility

Water contaminating. The product is insoluble and sinks in water.

Persistence and degradability

Not inherently biodegradable.

Bioaccumulative potential

Taking into consideration the properties of several components, the product is estimated not to be readily biodegradable according to OECD classification.

Ozone depletion potential

No ozone depleting chemicals are present or used in manufacture.

Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods - unused products

Should not be released into the environment. Classified as hazardous waste according to (national equivalent of EC-Dir. 91/689; disposal of toxic and hazardous waste). It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. Use a registered waste disposal company and supply accurate information about the nature of the hazard. Waste disposal number - 08 04 12 Adhesive and sealant sludges other than those mentioned in 08 04 11.

Waste treatment methods - contaminated packaging

Contaminated packaging is classified as hazardous waste. Empty containers should be transported/delivered using a registered waste carrier for local recycling or waste disposal. Waste disposal number - 15 01 08* Packaging containing residues or contaminated by dangerous substances.

14. TRANSPORT INFORMATION

UN Proper shipping name: Not classified as dangerous in the meaning of transport regulations.



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15. REGULATORY INFORMATION

Contains: BISPHENOL-A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700)
Contains Environmental: BISPHENOL-A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700)

Indication of danger:

Xi - Irritant.

Contains epoxy constituents. See information supplied by the manufacturer.

Xi



R -phrase(s)

R43 - May cause sensitization by skin contact.

R36/38 - Irritating to eyes and skin.

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S -phrase(s)

S 2 - Keep out of the reach of children.

S24 - Avoid contact with skin.

S28 - After contact with skin, wash immediately with plenty of soap and water.

S37 - Wear suitable gloves.

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

SVHC Compliance As can be seen in section 3 this material does not contain any Substance of Very High Concern (SVHC) as determined by the European REACH Regulation 1907/2006/EC in quantities above the reporting threshold.

International Inventories

United States TSCA: All chemicals in this product are listed in the inventory or, are exempt from the inventory as a naturally occurring substances.

Canada DSL: One or more chemicals in this product are not listed in the inventory.

Canada NDSL: One or more chemicals in this product are not listed in the inventory.

Europe EINECS All chemicals in this product are listed in the inventory or are polymers and hence exempt.

Europe ELINCS: One or more chemicals in this product are not listed in the inventory.

Korea ECL: All chemicals in this product are listed in the inventory.

China Inventory: All chemicals in this product are listed in the inventory.

Australia AICS: One or more chemicals in this product are not listed in the inventory.

Japan ENCS: One or more chemicals in this product are not listed in the inventory.

Philippines PICCS: All chemicals in this product are listed in the inventory.



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Legend

TSCA: Toxic Substance Control Act

DSL: Domestic Substance List

NDSL: Non-Domestic Substance List

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: EU List of Notified Chemical Substances

ECL: Existing Chemicals List aka Existing and Evaluated Chemical Substances

AICS: Inventory of Chemical Substances

ENCS: Existing and New Chemical Substances

PICCS: Phillipines Inventory of Chemicals and Chemical Substances

16. OTHER INFORMATION

Shelf life.

24 month(s). Any unused material should be sealed tightly to avoid premature curing.

Text of R phrases mentioned in Section 2

- R22 - Harmful if swallowed.
- R53 - May cause long-term adverse effects in the aquatic environment.
- R51 - Toxic to aquatic organisms.
- R43 - May cause sensitization by skin contact.
- R36/38 - Irritating to eyes and skin.
- R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Note: This material safety data sheet does not constitute an assessment of workplace risk as required by the Health & Safety at Work Act and the Control of Substances

This material does not contain any hazardous substances as determined by the European End-of-Life Vehicles (ELV) Directive 2000/53/EC.

This material does not contain any hazardous substances as determined by the European (RoHS) Directive 2002/95/EC.

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.