# Two component structural repair Epoxy mortar

#### **DESCRIPTION**

Two-component, solvent-free, filled, polyamide cured epoxy.

#### **USES**

Repairing and patching defects in concrete such as honeycomb and spalls.

## **FEATURES & BENEFITS**

- · Easily installed by gloved hand
- Easily smoothed to finish off
- Holds perfectly in overhead work
- Non-slump in vertical
- Needs no priming
- Strengths way above surrounding concrete
- Resistant to oils, fuels, water, dilute chemicals
- Non toxic in water containment.

## **SURFACE PREPARATION**

Any surface to be repaired with **ChemDermix 314** must be clean, mechanically sound and dry. The surface should be chipped to expose main aggregate and in the case of honeycomb, all suspect material must be cut out. The surface must be free of all debris prior to placing the compound.

## **BONDING / PRIMING**

Self-priming.

#### **MIXING**

ChemDermix 314 is a heavy paste to the extent that it can only be mixed by kneading with GLOVED HANDS. Set up equal volumes of base and activator side by side on a clean board. Do not take more than about 250ml of each compound at one time. Knead the two components together (like mixing bread dough) for at least five minutes.

#### **COVERAGE**

1m<sup>2</sup>/l/1mm thick.

## **APPLICATION**

Mixed ChemDermix 314 should be pressed into place in the repair area, always using a GLOVED HAND. The viscosity of ChemDermix 314 is sufficient to hold its place in soffit repairs and on vertical faces. If the void is too big to fill in one placing, leave the contact surface rough to act as a key for subsequent placing once the first application has set. A final smooth finish may be obtained by trowelling off the surface of the still uncured ChemDermix 314 with a water dampened steel trowel.

#### **CLEANING**

ChemCoats Super brush cleaner before dried / cured.

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PROPERTIES OF WET MATERIAL	
Mixing ratio	1 : 1 by volume
Density (typical)	2.0 g/cm <sup>3</sup>
Colour: Mixed	Grey
Finish	Trowelled to smooth finish with water – wet steel trowel
Flash point	+ 150° C
Dilution	Do not dilute
Consistency	Each component is a heavy paste
Toxicity	Uncured material is toxic

PROPERTIES DURING APPLICATION		
Application by	Gloved hand and/or steel trowel	
Pot life @ 25° C	110 – 130 minutes/500ml	
Volume solids	100 %	
Theoretical coverage	1 m <sup>2</sup> /l/1mm thickness	
Wet thickness at above	1mm	
Maximum recommended thickness per layer	25mm	
Curing time @ 25° C	Touch dry – 6 hrs Practical cure - 12 hrs full cure - 7 days	
Overcoating time @ 25° C	Minimum – 8 hrs maximum - 24 hrs	
Applicaton temp. Range	10° C – 40° C	
Fire resistance of wet material	Non-flammable	



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PROPERTIES OF CURED MATERIAL	
Maximum service temperature	Dry – 70° C Wet – 60° C
Compressive strength @ 25° C	60 MPa in 24 hrs 74 MPa in 7 days
Tensile strength @ 25° C	8 MPa
Lap shear on grit blasted steel	2mm bondline thickness
Arizone shear test	Concrete failure in bondline at 400 kN load 44 MPa concrete
Shrinkage during cure	Negligible
Toxicity	Non-toxic
Water resistance	Excellent
Tainting	Will not taint water
Solvent resistance	Resists aliphatic solvents, oils, petrol, diesel, fuel
Chemical resistance	Resists dilute inorganic acids and dilute alkalis

#### **PROTECTION ON COMPLETION**

Against traffic and spillage until cured. Most epoxies chalk and degrade in extensive sunlight.

# TEMPERATURE AND RELATIVE HUMIDITY

See "Properties of Materials, Properties During Application, Cured and Wet".

## **MODEL SPECIFICATIONS**

Two component epoxy mortar. The mortar shall be ChemDermix 314, a two component, solvent free, polyamide cured epoxy mortar applied in accordance with the manufacturers recommendations, Chem Coats Construction Chemicals. The cured mortar shall have a compressive strength of 74 mPa in seven days and be resistant to aliphatic solvents, oils, petrol and diesel fuel.

# **PACKAGING**

ChemDermix 314 is supplied in 71 kits.

#### **HANDLING & STORAGE**

This product has a shelf life of 12 months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened.

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#### **HEALTH & SAFETY**

Uncured **ChemDermix 314** is toxic and flammable. Always ventilate the working area well during application and drying. Avoid flames in vicinity. Always wear gloves when working with the material and avoid excessive inhalation and skin contact. If material is splashed in the eye, wash with copious quantities of clean water and seek medical attention.

Cured ChemDermix 314 is inert and harmless.

#### **IMPORTANT NOTE**

The information given in this data sheet is based on current development work and many years of field experience. Whilst every effort is made to ensure that the information is reliable, we cannot accept responsibility for any work carried out with our materials as we have no controls over methods of applications, site conditions etc. In view of the continuing research and development being undertaken in our laboratories we advice customers in their own interest to ensure that this data sheet has not been superseded by a more up-to-date publication. All products are sold subject to our standard conditions of sale which are available on request. Field services, where provided, does not constitute supervisory responsibility. For additional information, please contact your local **Chem Coats** representative.

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