



Unique Polymer Systems

ADVANCED POLYMER SURFACE ENGINEERING TECHNOLOGY

Unique Polymer Systems – Concrete Patch Repair



UPS 'Concrete Patch Repair' is a high performance self-priming epoxy repair mortar specifically designed for repairing damaged and eroded concrete surfaces.

UPS 'Concrete Patch Repair' is based on a unique blend of epoxy resins with polyamino amine adduct with a blend of reinforced silica quartz minerals which have been specifically selected to provide the optimum level of adhesion, abrasion, impact and chemical resistance.

UPS 'Concrete Patch Repair' is fast curing allowing repairs to be carried out on any concrete surface with the minimum disruption to services.

Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.

SURFACE PREPARATION

All dirt and loose friable material should be removed, and the surface cut back to a sound edge. Any exposed re-bars must be fully exposed and treated with a UPS 'Anti-Corrosion Aluminium'.

PRIMING

Whilst UPS 'Concrete Patch Repair' can be used without a primer, on certain very porous surfaces a coat of the mixed UPS 'Concrete Patch Repair' resins should be applied to prime / seal the surface.

Two parts of base resin should be mixed with one part of activator by volume and the mixed system brushed into the prepared surface.

MIXING

UPS 'Concrete Patch Repair' is a three component material which must be mixed together prior to use.

When mixing the complete unit the aggregate component should be removed from the outer container, which is then used as the mixing container. The base and activator containers should be emptied into the mixing container and mixed until homogeneous. The aggregate should now be added and thoroughly mixed into the base resins to ensure complete wetting out.

APPLICATION

The mixed UPS 'Concrete Patch Repair' should be applied by float or trowel to the prepared surface with the material being pressed firmly onto the surface then finished by float to give a smooth surface.

All equipment must be cleaned IMMEDIATELY after use with UPS 'Cleaner'.

Volume Capacity: 450 cc (27.5 cu. in) per kilo

PHYSICAL CONSTANTS

Mixing Ratio Mix as supplied. When mixing less than the complete unit, two volumes of base and one volume of activator should be mixed together and then aggregate added to mix to give the desired consistency.

Appearance

Base	Clear Liquid
Activator	Clear Amber Liquid
Aggregate	Coloured Granules

Drying & Cure times at 20°C (68°F)

Usable Life	12 minutes		
	25 minutes	(with	
	aggregate)		
Full Cure	3½ hours		

Volume Solids 100%

V.O.C Nil

Shelf Life Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F)

Food Contact Meets U.S.D.A. requirements for incidental food contact.
Meets FDA CFR 21.175.300 requirements for food contact.

PHYSICAL PROPERTIES

Abrasion Resistance 145 mgm weight loss per 1000 cycles - 1 kg load . CS17 Wheel
ASTM D4060

Impact Resistance 1.8 Joules (16 in lbs)
ASTM D2794

Dry Heat Resistance 135°C (275°F)
ASTMD2485

Direct Pull Adhesion 35 kg/cm² (500 psi) - concrete (concrete failure)
ASTM D4541

Scrub Resistance >10,000 cycles
ASTM D2486

Compressive Strength 840 kg/cm² (12000 psi)
ASTM D695

Flexural Strength 450 kg/cm² (6500 psi)
ASTM D790

Shrinkage Nil
ASTM C246

HEALTH AND SAFETY

As long as normal good practice is observed UPS 'Concrete Patch Repair' can be safely used.

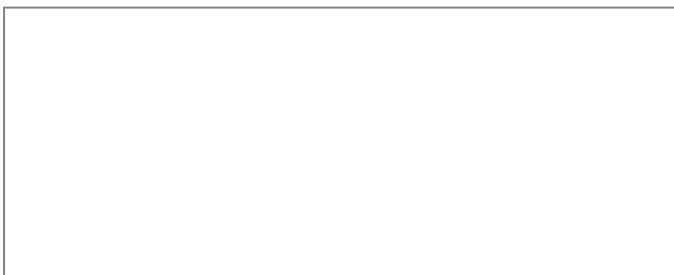
Protective gloves should be worn.

A fully detailed Material Safety Data Sheet is either included with the material or is available on request.

PACKAGING

Supplied in 5kg packs.

FOR FURTHER INFORMATION PLEASE CONTACT



The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests.



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