



Unique Polymer Systems

ADVANCED POLYMER SURFACE ENGINEERING TECHNOLOGY

Unique Polymer Systems 'A & B Cement'



UPS 'A & B Cement' is a high performance multi purpose epoxy adhesive specifically developed for repairs where difficult adhesion conditions exist.

UPS 'A & B Cement' is formulated on a complex range of epoxy resins combined with a polyamino curing system reinforced with inert fillers to enhance the adhesion properties of the whole system.

UPS 'A & B Cement' can be applied to virtually any surface to form an effective bond. In addition to being used as an adhesive UPS A&B Cement can also be used to fill cracks in components and castings prior to application of UPS Resin Repair Systems.

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

SURFACE PREPARATION

Heavy contamination due to oil or grease must first be removed using **UPS 'Cleaner'**.

All loose material, rust and surface contaminants, including existing coatings, must be removed and the surface roughened by using an angle grinder, needle gun or abrasive blasting. Where grinding or needle gunning is used, the surface should be cross-scored to improve adhesion. Care must be taken, when angle grinding, to avoid polishing rather than roughening metal surfaces.

Where possible, abrasive blasting is the preferred surface preparation.

MIXING

UPS 'A & B Cement' is a two component solvent free material comprising resin and hardener components which must be mixed together prior to use.

Measure 1 volume of resin component and 1 volume hardener component onto a clean mixing board or other suitable surface. The two components should then be thoroughly mixed until completely streak free.

The mixed material should be used within 20 minutes of mixing at 20°C (68°F). This time will be reduced at higher temperatures and extended at lower temperatures.

APPLICATION

The mixed material should be pressed firmly onto the prepared area, working the material into any cracks and surface defects.

When **UPS 'A & B Cement'** is being used to bond two surfaces together, both surfaces should be coated with the material. The two pieces should then be pressed firmly together and clamped in position until the product has set, any excess material squeezed out should be scraped away before the **UPS 'A & B Cement'** begins to cure.

Where a **UPS** repair is to be carried out on a cracked pipe or plate then **UPS 'A & B Cement'** should be trowelled into the crack before proceeding with the repair. Where the crack is still leaking a little, then it is recommended that **UPS 'A & B Cement'** should be left to cure partially before being re-trowelled into the crack.

Once **UPS 'A & B Cement'** has cured for a minimum of 2 hours at 20°C (68°F), sanding, grinding and machining etc. can be carried out.

TECHNICAL DATASHEET UPS19002

Unique Polymer Systems 'A & B Cement'

PHYSICAL CONSTANTS

Mixing Ratio	Resin	Hardener	
	1	1	By volume
	1	1	By weight
Appearance	Resin Hardener	Black Paste Light Grey Paste	
Drying & Cure times at 20°C (68°F)	Usable Life		20 minutes
	Initial Set		60 mins
	Full Cure		3 days
Volume Solids	100%		
V.O.C.	Nil		

Shelf Life

Use within 5 years of purchase. Store in original sealed containers at

Volume Capacity

740cc(45.2 cu ins) per kilo

PHYSICAL PROPERTIES

Corrosion Resistance

ASTM B117

Flexural Strength

ASTM D 790

210g/cm² (3000 psi)

Hardness (Rockwell R)

ASTM D785

(Post Cured 24 hrs at 100°C/212°F)

100

Tensile Shear Adhesion

ASTM D1002 (Aluminium)

37kg/cm² (525 psi)

Tensile Strength

ASTM

258kg/cm² (3670 psi)

HEALTH AND SAFETY

As long as normal good practice is observed **UPS 'A & B Cement'** can be safely used.

Protective gloves should be worn during use.

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

PACKAGING

Supplied in 176gm and 1kg 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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