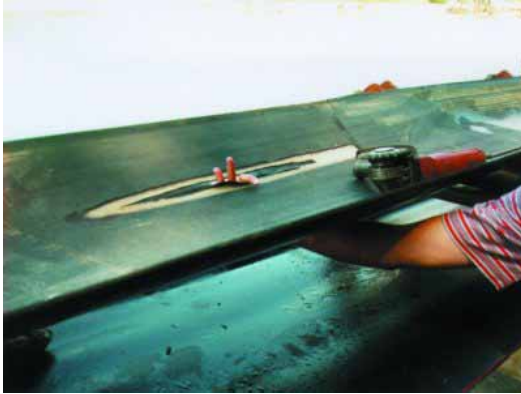




Unique Polymer Systems

ADVANCED POLYMER SURFACE ENGINEERING TECHNOLOGY

Unique Polymer Systems - '60' DUROMETER Fluid Elastomer



UPS '60 DUROMETER Fluid Elastomer' is a 60 Durometer high performance paste grade elastomer which has been specifically developed for the repair of rubber components by trowel or putty knife and is suitable for use on impellers, chutes, hoppers, valves, rollers, gaskets, hoses, conveyor belts, off road tyres etc.

UPS '60 DUROMETER Fluid Elastomer' is based on a complex blend of polyols and polyesters in combination with amine catalysts and activators to produce a cold vulcanising product with outstanding mechanical strength.

The properties of **UPS '60 DUROMETER Fluid Elastomer'** have been designed to match factory produced rubbers.

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

SURFACE PREPARATION

All existing dirt, oil and grease should be removed and the surface wiped with UPS 'Cleaner'.

Any areas of frayed or fragmented rubber should be cut away to provide a sound repair area.

Smooth surfaces, including metals, should be mechanically etched to produce a good profile, with abrasive blasting being preferred for metal substrates. Rubber surfaces are best roughened using a stiff wire brush / comb.

Edges of repair areas of belts, hoses, tyres etc. should be undercut.

All loose dust and particles should be blown clear of the prepared surface.

On certain repairs such as gaskets and castings where one surface is not required to bond to the UPS '60 DUROMETER Fluid Elastomer', these surfaces should be treated with UPS 'Release Agent'.

PRIMING

All areas to be repaired or resurfaced should be first primed with UPS 'Elastomer Primer'.

The primer should be applied with a soft bristled brush to give an even, but low coating thickness, taking care to avoid ponding of the primer.

The primer should be allowed a minimum of 60 minutes and a maximum of 8 hours at 20°C (68°F) before applying the UPS '60 DUROMETER Fluid Elastomer'

Where a faster drying primer is required UPS '60 DUROMETER Fluid Elastomer' Primer can be used. Please refer to UPS '60 DUROMETER Fluid Elastomer' Tech Sheet.

MIXING

UPS '60 DUROMETER Fluid Elastomer' is a two component material which must be mixed together prior to use.

The contents of the resin container should be transferred to the mixing container provided. The contents of the hardener should be added to the resin with continuous stirring to produce a streak free viscous liquid.

Where less than full unit mixes are required it is essential that the product be mixed accurately weighing out the quantities of base and activator.

Thorough mixing is extremely important, and once the material appears mixed, a further period of mixing should be carried out to ensure there is no unmixed material.

The mixed material should be used within 30 minutes of mixing at 20°C (68°F).

TECHNICAL DATASHEET UPS300

Unique Polymer Systems - '60' DUROMETER Fluid Elastomer

APPLICATION

For resurfacing the mixed material should be applied evenly to the primed surface with a clean brush. When a second coat is should be applied as soon as possible, after the initial set and within 24 hours of the first coat being applied.

For casting / moulding the mixed product should be poured into the prepared mould, the filled mould should be gently vibrated to aid the release of trapped air.

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

Volume Capacity 900cc (54.8 cu ins) per kilo

PHYSICAL CONSTANTS

Mixing Ratio	Resin	Hardener	
	2	1	By volume
	2	1	By Weight

Appearance	Resin	Hardener
	Opaque Soft Gel	Coloured Viscous Liquid

Drying & Cure times at 20°C (68°F)

Usable Life	25 minutes
Initial Set	3 hours
Machining	16 hours
Full Mechanical	3 days

Volume Solids 100%

V.O.C Nil

Shelf Life Use within 12 months of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F)

Operating Temperature

	Maximum	Continuous
Dry Heat	120°C (250°F)	80°C (176°F)
Wet Heat	80°C (175°F)	50°C (122°F)

PHYSICAL PROPERTIES

Tensile Strength
ASTM D412 70 kg/cm² (1000 psi)

Tear Strength
ASTM D624 36 kg/cm (200 pli)

Elongation
ASTM D412 800%

Shore A Hardness
ASTM D2240 60

Peel Adhesion (Concrete & Steel)
ASTM D903 9 kg/cm (50 pli) – cohesive failure in '60 Durometer

Dielectric Strength
ASTM D149 16 volts/micron (400 volts/mil)

HEALTH AND SAFETY

As long as normal good practice is observed UPS '60 DUROMETER Fluid Elastomer' can be safely used.

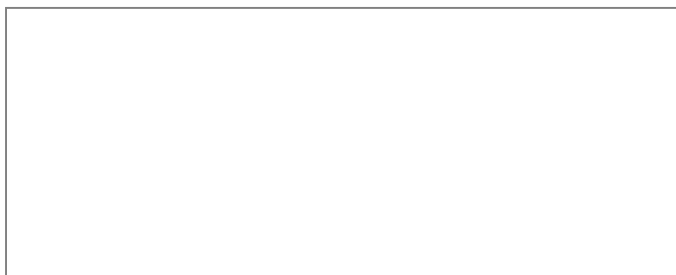
Protective gloves should be worn.

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

PACKAGING

Supplied in 0.600kg packs.

FOR FURTHER INFORMATION PLEASE CONTACT



Unique Polymer Systems

www.UniquePolymerSystems.com
Quarry House, Hollybush, Ledbury,
Herefordshire. HR8 1ET. UK
Tel: +44(0)1531 636300
Fax: +44(0)8700 558801
Email: sales@UniquePolymerSystems.com