



UPS 320 EG '80' Durometer Paste Elastomer is a high performance paste grade elastomer which has been specially 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 320 EG '80' is based on a complex blend of polyols and polyesters in combination with amine catalysts and activators to produce a cold vulcanizing product with outstanding mechanical strength.

The properties of *UPS 320 EG '80'* have been designed to match factory produced elastomers.

Product Features

- Designed for application by trowel or spatula at thicknesses up to 6mm.
- Provides good cold vulcanizing capabilities.

Product Applications

Designed for use to repair conveyor belts, rollers, gaskets, hoses, off road tyres, etc.

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 TAC 883 Universal 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 re best roughened using a stiff wire brush / comb. Edges or repair areas of belts, hoses, tyres etc. should be undercut all loose dust and particles should be blown clear of prepared surface.

On certain repairs such as gaskets and castings where one surface is not required to bond to *UPS 320 EG '80'*,

these surfaces should be treated with *UPS TAC 872 Release Agent*.

Priming

All areas to be repaired or resurfaced should be first primer with *UPS TAC 075 Urethane Elastomer Primer*. The primer should be applied with a soft bristled brush to give an even, but low coating thickness, taking care to avoid bonding of the primer. The primer should be allowed a minimum of 60 minutes and a maximum of 8 hours at 20° before applying *UPS 320 EG '80'*.

Mixing

UPS 320 EG '80' is a two component material which must be mixed together prior to use.

The contents of Base container should be transferred to the mixing container provided, and the Activator components added whilst stirring the base. Soon after blending a soft gel is formed and this gelled material should now be transferred to a mixing board and the product further mixed to ensure the material is completely homogeneous.

The mixed material should be used within 15 minutes of mixing at 20°C.

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.

Application

The mixed material should be pressed firmly onto the prepared area working the product into cracks or defects on the surface. Where necessary, reinforcement rape (*UPS TBRT 4*) should be bedded into the material and overlapped to provide multi-layer reinforcement.

All equipment must be cleaned immediately after use with *UPS TAC 883 Universal Cleaner* or MEK.

Physical Constraints

Volume Capacity	736cc (45cu ins / kg)	
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Mixing Ratio	Base	Activator
By Weight	5	4
By Volume	5	4

Colour	Black
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Drying & Cure Times at 20°C (68°F)	
Useable Life	15 minutes
Initial Set	1 hour
Machining	16 hours
Full Mechanical	3 days

Volume Solids	100%
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V.O.C (As Supplied)	Nil
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Film Thickness	Up to 6mm
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Shelf Life	
Use within 12 months of manufacture date. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).	

Maximum Operating Temperatures	
Dry Heat	80°C (176°F)
Wet Heat	50°C (122°F)

Physical Properties

Tensile Strength ASTM D 412	12N/mm ² (1750 psi)
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Dielectric Strength ASTM D 419	16KV/mm
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Elongation ASTM D 412	250%
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Shore A Hardness ASTM D 2240	80
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UV Resistance BS 3900:F3	No loss in properties after 1000 hours exposure
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Tear Strength ASTM D 624	50N/mm (325 pli)
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Peel Adhesion (Concrete & Steel) ASTM D 903	9kg/cm (50 pli) – Cohesive failure in product
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Packaging

UPS 320 EG '80' is supplied in the following;
4 X 0.8kg

Health And Safety

As long as normal good practice is observed UPS 320 EG '80' 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.

The information provided in this Technical 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 Unique Polymer Systems LTD. Users should determine the suitability of the product for their own particular purposes by their own tests.

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