

3M™ Scotchkote™

Urethane Elastomer 80FG 532

Updated
Supersedes

July 2014
January 2013

Data Sheet and Application Guide

Product Description

Scotchkote Urethane Elastomer 80FG 532 has been specifically developed as an elastomeric system with a high degree of flexibility for casting and moulding rubber components.

Product Features

- Properties equal to factory produced rubbers.
- Designed for moulding and casting of flexible components.
- Designed for use to resurface impellers, chutes, hoppers etc.

General Application Steps

1. Remove oil, grease and loosely adhering deposits and degraded rubber.
2. Thoroughly abrade the surface, to produce a rough fibrous finish.
3. Apply Scotchkote Urethane Elastomer 80FG 532 to the required thickness.
4. Allow to cure.
5. Visually inspect the coating for defects.
6. Repair all defects.

Properties

Property	Value
Colour	Black
Ratio	1:1.4 By volume 3:4 By weight
Drying & Cure times at 20°C (68°F)	
Useable life	15 mins
Initial Set	1 hour
Machining	16 hours
Full Mechanical	3 Days
Volume Solids	100%
V.O.C (As Supplied)	Nil
Volume Capacity	933cc (57 cu ins) per kilo
Performance Data	
Tensile Strength	12N/mm ² (2000 psi) (ASTM D412)
Dielectric Strength	16KV/mm (ASTM D419)
Elongation	250%
Shore A Hardness	80 (ASTM D2240)
Tear Strength	50N/mm (325 pli) (ASTM D624)
Maximum Operating Temperatures	80°C (176°F) - Dry 50°C (122°F) - Wet
UV Resistance	No loss in properties after 1000 hours exposure (BS 3900:F3)
Peel Adhesion (Concrete and Steel)	9kg/cm (50pli) - cohesive failure in product (ASTM D903)



Application Procedures for Scotchkote Urethane Elastomer 80FG 532

Surface Preparation

All existing dirt, oil and grease should be removed and the surface wiped with 3M™ Scotchkote™ Cleaner 020.

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 Scotchkote Urethane Elastomer 80FG 532, these surfaces should be treated with 3M™ Scotchkote™ Release Agent 035.

Priming

All areas to be repaired or resurfaced should be first primed with 3M™ Scotchkote™ Urethane Elastomer Primer 075. 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 before applying Scotchkote Urethane Elastomer 80FG 532.

Product Mixing

Scotchkote Urethane Elastomer 80FG 532 is a two component material which must be mixed together prior to use.

The contents of the Part A (Base) container should be transferred to the mixing container provided. The contents of the Part B (Activator) should be added to the Part A (Base) 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 Part A (Base) and Part B (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 15 minutes of mixing at 20°C.

Application Procedures

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 Scotchkote Cleaner 020.

Packaging and Storage

Supplied in 0.50 and 2.0 kilo packs

Use within 12 months of date of manufacture. Store in original sealed containers at temperatures between 5°C and 32°C.

Handling and Safety Precautions

Read all health hazard, precautionary and first aid statements found in the Material Safety Data Sheet, and/or product label prior to handling or use.

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Ordering Information/Customer Service

For ordering, technical and product information or to request a copy of the Material Safety Data Sheet, call +44 (0)1609 780170 or fax +44 (0)1609 783762 (Sales) or 788718 (Technical).

For emergencies, please contact +44 (0)1344 858000.

Important Notice

All statements, technical information and recommendations are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using the 3M™ Scotchkote™ Product, you must evaluate it and determine if it is suitable for your intended application. Because conditions of product use are outside of 3M control's and vary widely you assume all risks and liability associated with such use. Any product related statements not contained in current 3M publications, or any contrary statements contained in your purchase order, shall have no force or effect unless expressly agreed to in writing by an authorised officer of 3M.

Warranty; Limited Remedy; Limited Liability.

3M warrants that the 3M™ Scotchkote™ Product will conform to 3M published specifications upon shipment. If the product is proven not to have met the specifications your exclusive remedy within 12 months of sale by 3M of the product and 3M's sole obligation will be, at 3M's option, to replace the Product or to refund the purchase price of the Product. Except where prohibited by law, this warranty is made in lieu of all other warranties, express or implied, including, but not limited to, any implied warranty of suitability or fitness for a particular purpose, or those arising from a course of dealing, custom or usage or trade.

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Electrical Markets Division (EMD)

3M United Kingdom plc
23 Standard Way Industrial Estate
Northallerton
North Yorkshire DL6 2XA
United Kingdom
Phone: +44 (0)1609 780170
www.3M.co.uk/scotchkote

Electrical Markets Division (EMD)

3M United Kingdom plc
3M Centre
Cain Road, Bracknell
Berkshire RG12 8HT
Phone: 01344 858000
Fax: 01344 857970
www.3M.co.uk

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