

# 3M™ Scotchkote™ Urethane Coating PU 846

Updated July 2014  
Supersedes March 2014

## Data Sheet and Application Guide

### Product Description

Scotchkote Urethane Coating PU 846 has been specifically developed as a single component durable finish system for use on pvc coated metal cladding. The product is also suitable for use on other internal and external surfaces, including floors.

### Product Features

- Combines good application characteristics with fast drying capabilities.
- Suitable for brush or roller application.
- Can be applied in temperatures down to 0°C.
- Tested by British Steel/Corus for use on PVC Plastisol.

### General Application Steps

1. Remove surface contamination and appropriately prepare the surface.
2. Apply primers if required.
3. Apply Scotchkote Urethane Coating PU 846.
4. Allow to cure.
5. Inspect the coating for defects.
6. Repair all defects.

### Properties

Property	Value
Colour	Manufactured to a select range of colours subject to minimum batch quantities.
<b>Drying &amp; Cure times at 20°C (68°F)</b>	
Touch Dry	4 hours
Rainfall Resistant	4 hours
Minimum Overcoating	16 hours
Full Cure	7 days
Volume Solids	60%
Specific Gravity (Average Mixed)	1.33
V.O.C (As Supplied)	310-350g/ltr depending on colour
Film Thickness (Typical)	Wet 125 microns. Dry 75 microns
Theoretical Coverage Rate	8sq metres per litre at 75 microns dft.
<b>Performance Data</b>	
Abrasion Resistance	130mgm weight loss per 1000 cycles - 1kg load - CS17 Wheel (ASTM D4060)
Impact Resistance	13.55 Joules (120 in lbs) (ASTM D2794)
Elongation	200% (ASTM D412)
Water Vapour Permeability	2.87 x 10 <sup>-4</sup> perm.cm (ASTM D1653)
UV Resistance	No loss of gloss, no colour change after 1000 hours exposure (ASTM G53 (QUV-B))
Salt Fog Resistance	1000 hours exposure (ASTM B117)
Scrub Resistance	>5,000 cycles (ASTM D2486)
Humidity Resistance	,000 hours exposure (BS 3900 - F2)
Tensile Strength	20.5 Mpa (3000psi) (ASTM D638)
Tear Strength	70N/mm (400 pli) (ASTM D624)
British Steel 2mm Cross Scribe/Erichson Draw Test on HPS 200 Plastisol Coated Sheet	Excellent Adhesion



# Application Procedures for Scotchkote Urethane Coating PU 846

## Surface Preparation

All surfaces should be clean, dry and free from contamination.

**Plastisol Surfaces** - should be detergent cleaned to remove dirt and grime. Loose flaking material must be removed back to a sound edge. Exposed metal surfaces should now be patch primed with 3M™ Scotchkote™ Urethane Aluminium Primer MCU 125.

Other surfaces should be prepared and primed in accordance with the appropriate 'SYSTEM APPLICATION GUIDE.'

## Application Procedures

### Mixing

Single component product supplied ready for use and should only require stirring prior to use to incorporate any slight separation..

### Application

Provided the prepared surface is dry and free from condensation or ice Scotchkote Urethane Coating PU 846 can be applied in temperatures down to 0°C with no restriction on relative humidity.

However, Scotchkote Urethane Primer MCU 126 should not be applied during rain/snow or when precipitation is likely to occur before the coating has achieved a 'touch dry' state.

**Brush:** Good quality brushes should be used with even strokes, ensuring that the Scotchkote Urethane Coating PU 846 is not over-brushed leading to less than the specified coating thickness.

**Roller:** Short pile mohair rollers are the preferred equipment for this application method. Scotchkote Urethane Coating PU 846 should be spread evenly with regular checks made to ensure the correct uniform wet film thickness is achieved. Scotchkote Urethane Coating PU 846 does not normally require thinning for brush/ roller application. Where thinning is required 3M™ Scotchkote™ Thinners PU71 may be added.

All equipment must be cleaned IMMEDIATELY after use with Thinners PU71.

## Packaging and Storage

Supplied in 20 litre units.

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, 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  
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.

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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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