

# 3M™ Scotchkote™ Urethane Coating XF 129

Updated July 2014  
Supersedes September 2013

## Data Sheet and Application Guide

### Product Description

Scotchkote Urethane Coating XF 129 has been developed to provide a durable gloss finish for use as the final coat of Scotchkote coating systems in the construction and transport industries.

### Product Features

- Combines good application characteristics with excellent gloss and colour retention.
- Suitable for use in flooring and corrosion protection applications.
- Widely used throughout the rail and road infrastructure for bridge protection.
- In combination with 3M™ Scotchkote™ Epoxy Coating 152LV, certified to Network Rail Specification NR/L3/CIV/039.

**Abrasion:** Good resistance to abrasion and mechanical damage.

**Adhesion:** Excellent on correctly prepared and primed surfaces.

**Chemical Resistance:** The fully cured coating offers excellent resistance to aqueous solutions, oils, fats and a wide range of industrial chemicals.

**Temperature resistance:** Dry service temperature range up to 100°C.

### General Application Steps

1. Ensure coated surface is clean, dry and free from contamination.
2. Apply Scotchkote Urethane Coating XF 129 at the specified thickness.
3. Allow to cure.
4. Visually or electrically inspect the coating for defects.
5. Repair all defects.

### Properties

Property	Value
Colour	Manufactured to order from a select range of BS, RAL or NCS colour standards.
Ratio	6:1 by volume
<b>Drying &amp; Cure times at 20°C (68°F)</b>	
Usable Life	Approximately 2 hours
Touch Dry	1 hour
Hard Dry	4 hours
Overcoating Minimum	1 hour
Maximum	24 hours
Full Cure	7 days
Volume Solids	56%
Specific Gravity (Average Mixed)	1.12
V.O.C (As Supplied)	418-448g/litre depending on colour
VOC (Thinned 10%)	460-484g/litre depending on colour
Film Thickness (Typical)	Wet 90 microns. Dry 50 microns
Theoretical Coverage Rate	11sq metres per litre at 50 microns dft.
Note: The actual thickness to be applied should be agreed between the specifier and the manufacturer dependant on operational performance criteria and may be higher or lower than the quoted typical value.	
<b>Performance Data (Applied over Epoxy Primer MC135)</b>	
Abrasion Resistance	25mgm weight loss over 500 cycles - 1kg load - CS10 wheel (ASTM D4060)
Impact Resistance	1.5 Joules (ASTM G14)
Dry Heat Resistance	100°C (212°F) (ASTM D2485)
Direct Pull Adhesion	6.2Mpa (900 psi) - Steel 4Mpa (600 psi) - Concrete (Concrete Failure) (ASTM D4541)
Pencil Hardness	2H (ASTM D3363)
Salt Fog Resistance	5,000 hours exposure (ASTM B117)
Resistance to Artificial Weathering	500 hours, Loss of gloss - 14 gloss units (60° Head) 1-2 units ΔE colour difference (BS3900: - F16) (ISO 11507)
Humidity Resistance	50 cycles exposure (BS 3900: - 8) (ISO 3231)
Scratch Resistance	No failure 2.0kg load (BS 3900: - E2) (ISO 1518)



# Application Procedures for Scotchkote Urethane Coating XF 129

All surfaces should be prepared and primed in accordance with the appropriate 'SYSTEM RECOMMENDATION.'

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

## Application Procedures

### Mixing

To ensure a homogenous mix, Part A (Base) should be stirred then whilst continuing stirring Part B (Activator) should be added and thoroughly mixed.

### Application

Application should not be carried out when relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point. The minimum temperature for application is 2°C.

**Brush:** Good quality brushes should be used with even strokes, ensuring that the Scotchkote Urethane Coating XF 129 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 XF 129 should be spread evenly with regular checks made to ensure the correct uniform wet film thickness is achieved.

Scotchkote Urethane Coating XF 129 does not normally require thinning for brush/ roller application. Where thinning is required 3M™ Scotchkote™ Thinners PU71 may be added.

## 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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## 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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**Airless Spray:** Typical spray settings are as follows:

Pump Ratio 32:1

Tip Size 0.013-0.015"

Tip Pressure 2000 psi

Excessively high tip spraying pressure should be avoided.

The minimum pressure at the pump conducive to good atomisation should be used. Scotchkote Urethane Coating XF 129 may require up to 10% Scotchkote Thinners PU71 for airless spray application.

**Conventional Spray:** Most types of equipment are suitable.

Pressure Pot

Needle Set Up 1.1 - 1.8mm

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

## Packaging and Storage

Supplied in 3.5 and 17.5 litre packs.

Use within 2 years of date of manufacture. Store in original sealed containers at temperatures between 5°C and 32°C.

## 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.

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