

# 3M™ Scotchkote™ Urethane Coating XF 129

## 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.

### Performance Data (Applied over Epoxy Primer MC135)

|                                     |   |
|-------------------------------------|---|
| 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<br>4Mpa (600 psi) - Concrete (Concrete Failure) (ASTM D4541)                           |
| Pencil Hardness                     | 2H (ASTM D3363)   |
| Salt Fog Resistance                 | Excellent, unaffected after 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                 | Unaffected after 50 cycles (BS 3900: - 8) (ISO 3231)  |
| Scratch Resistance                  | No failure 2.0kg load (BS 3900: - E2) (ISO 1518)  |



# Application Procedures for 3M™ 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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**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 or fax +44 (0)1609 783762 (Sales) or 788718 (Technical).

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



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