

constructive solutions

# Solvent free, hardwearing, flexible polyurethane coating

#### Uses

Nitocote UR150 is a polyurethane coating designed to provide added level of protection to concrete and steel surfaces. Typical areas of application are

- Pipelines
- Retaining walls
- Bridge structures and so on

# **Advantages**

- Excellent adhesion to substrate
- Very good corrosion resistance and chemical resistance
- Flexibility and crack bridging
- Seamless & water tight
- UV resistant
- Easy application & safe

### **Description**

Nitocote UR150 is a solvent free polyurethane coating comprising of a primer and flexible top coat. All components are applied in liquid phase and react chemically to form a tough, flexible waterproof protective coating.

Nitocote UR150 is available in a range of standard colors. Contact your local Fosroc office for full details.

### **Properties**

Elongation		
(ASTM D4541)	:	> 5% N/mm <sup>2</sup>
Impact Resistance		
(ASTM D2794)	:	>6 kN/mm
Flexibility		
(ASTM D522)	:	Passes @ 180° over a 2"
,		mandril
Chemical resistance		
(ASTM D714-1000 hr)	:	Passes
Elongation (ASTM D412)	:	150-200%
Tensile strength		
(ASTM D412)	:	8-10N/mm <sup>2</sup>
Tear Resistance		
(ASTM D624)	:	20-25 N/mm <sup>2</sup>
Adhesive bond strength		> 1N/mm <sup>2</sup>
with concrete	•	
with concrete		

Shore A Hardness

(ASTM D2240) : **60-80** 

Overcoating time @ 35°C : 12-16 hours

#### **Chemical Resistance**

Nitocote UR150 is resistant to a range of chemicals including:

- Petrol, Engine Oil
- Diesel, Medium concentration acids
- Detergents etc.

For full details contact your local Fosroc office.

### Instructions for use

# **Surface Preparation**

New concrete surfaces should have reached 80% of their intended physical properties - generally only achieved after a minimum curing period of 28 days. Existing concrete surfaces must be prepared to provide a clean, sound substrate.

Surfaces should be clean and dry with open capillary, free from laitance, oil and grease, curing compounds or other surface contaminants which may prevent full and proper adhesion of the primer. All blowholes, and other surface undulations should be repaired using an appropriate Fosroc product.

# **Application**

#### **Primer**

Apply Nitocote UR150 Primer to the prepared surface at an application rate in the range of 0.2 to  $0.3 \text{ ltr/m}^2$ .

# **Top Coat**

Apply Nitocote UR150 Top Coat to the primed surface at an application rate in the range of 0.3 - 0.6 ltr/m² per coat. For best results the Nitocote UR150 Top Coat should be applied with a short haired lambswool roller.

Traffic marking lines may be applied using suitable product from Fosroc after five days from time of application.

### Cleaning

Tools and equipment should be cleaned immediately after use with Nitoflor Sol\*.

### **Technical Support**

Fosroc offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance, an AutoCAD facility and dedicated specification assistance in locations all over the world.

# **Estimating**

#### Supply

Nitocote UR150 Primer	:	9.0 litr	e packs
Nitocote UR150 Top Coat	:	18.0 lit	re packs
Coverage			
Primer		:	0.2 - 0.3
litre/m²			
Top coat		:	0.3 - 0.6
litre/m²			
(per coat - 2 coat application	reco	mmende	d)

**Note:** The above coverage rates are given for guidance only as actual quantities used will vary depending upon the nature of substrate and conditions on site. It is strongly advised that trials are conducted to establish coverage rates.

# **Storage**

# Shelf life

When stored in warehouse conditions at less than 25°C, Nitocote UR150 will have a shelf life of 12 months.

# Limitations

Nitocote UR150 should not be applied on to surfaces which are known to or likely to suffer from rising damp or have a relative humidity greater than 75% as measured in accordance with BS8203 Appendix A or by Thermohygrometer.

- In conditions of high relative humidity i.e. 85-90%, good ventilation conditions are essential. Substrate temperature should be atleast 3°C above dew point.
- Do not proceed with application if precipitation is imminent, or temperatures are expected to drop below 7°C within 24 hours of application.

# **High temperature working**

It is suggested that, for temperatures above 35°C, the following quidelines are adopted as good working practice:

- (i) Store material in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.
- (ii) Keep equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come in direct contact with the material itself.
- (iii) Try to eliminate application during the hottest times of the day.
- (iv) Make sufficient material, plant and labour available to ensure that the application is a continuous process.

# **Precautions**

# **Health and safety**

Nitocote UR150 Primer and Nitoflor Sol should not come in contact with skin or eyes, nor should they be swallowed. Avoid inhalation of vapours and ensure adequate ventilation.

Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye/face protection. Barrier cream can provide additional skin protection.

Should accidental skin contact occur, remove immediately with a resin removing cream followed by washing with soap and water - do not use solvent.

The use of goggles is recommended, in case of accidental eye contamination, rinse immediately with plenty of water and seek medical advice.

If swallowed seek medical attention immediately - do not induce vomiting.



#### Fire

Nitoflor Sol and Nitocote UR150 Primer are flammable. Do not use near a naked flame.

# Flash points

Nitoflor Sol	:	33°C
Nitocote UR150 Primer	:	59°C

### **Additional Information**

Fosroc manufactures a wide range of complementary products which include :

- waterproofing membranes & waterstops
- joint sealants & filler boards
- cementitious & epoxy grouts
- specialised flooring materials

Fosroc additionally offers a comprehensive package of products specifically designed for the repair and refurbishment of damaged concrete. Fosroc's 'Systematic Approach' to concrete repair features the following:

- hand-placed repair mortars
- spray grade repair mortars
- fluid micro-concretes
- chemically resistant epoxy mortars
- anti-carbonation/anti-chloride protective coatings
- chemical and abrasion resistant coatings

For further information on any of the above, please consult your local Fosroc office - as below.





# Fosroc Chemicals (India) Pvt. Ltd.

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# Important note:

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.

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