



# Mapecoat TNS Urban

**Acrylic resin-based coloured coating in water dispersion with selected fillers, for coating cycle tracks, footpaths and urban features**

## **WHERE TO USE**

Coating and protecting cycle tracks, footpaths and urban features.

### **Some application examples**

New and old cycle tracks, footpaths and urban features in cement or asphalt.

## **TECHNICAL CHARACTERISTICS**

**Mapecoat TNS Urban** is a coating product for external surfaces composed of a balanced mixture of acrylic resins in water dispersion and selected fillers.

**Mapecoat TNS Urban** may be applied on both old surfaces which are already painted and on new surfaces which require painting.

**Mapecoat TNS Urban** coats surfaces and protects substrates (in asphalt or cement) against deterioration, and leaves a finish which is also non-slip and resistant to contact with oil and fuel.

**Mapecoat TNS Urban** has excellent resistance to abrasion and guarantees the durability of surfaces, even when used frequently.

**Mapecoat TNS Urban** is resistant to all types of climatic conditions, aggression from smog and sunlight and offers hard-wearing, durable protection for substrates.

**Mapecoat TNS Urban** is available in 20 standard colours and in a wide range of other colours upon request.

## **RECOMMENDATIONS**

- Do not dilute **Mapecoat TNS Urban** with solvents.
- Do not apply **Mapecoat TNS Urban** directly on dusty, crumbling or inconsistent surfaces.
- Do not apply **Mapecoat TNS Urban** on substrates polluted with oil, grease or dirt in general.
- **Mapecoat TNS Urban** must not be applied directly on substrates subject to water under pressure. In such cases, the surface must be treated with an appropriate product, and only after applying such a product should the possibility of using **Mapecoat TNS Urban** be assessed.
- **Mapecoat TNS Urban** may only be applied on top of other finishing products after carefully checking the state of the old layer, and after carrying out preliminary tests to verify that they are compatible and that there is good adherence between the old paint and **Mapecoat TNS Urban**.

## **APPLICATION PROCEDURE**

### **Preparation of concrete substrates**

Concrete surfaces to be treated with this product must be clean, free of loose parts and as flat as possible or with a maximum slope of 1.5%. The substrate must be sufficiently strong for the loads to which the surface will be subjected when in service.

Any cracks must be repaired by filling them with **Eporip**, while any deteriorated areas of the concrete must be repaired with a cementitious mortar from the **Mapecrout** range or with **Planitop Smooth & Repair**.

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

### DESCRIPTION

Mapecoat TNS Urban is an acrylic resin-based coloured coating in water dispersion with selected fillers, for coating cycle tracks, footpaths and urban features

### WHERE TO USE

Coating and protecting cycle tracks, footpaths and urban features

### CHARACTERISTICS

Appearance:	pasty liquid
Dry solids content (%):	70
Density (g/cm <sup>3</sup> ):	approx. 1.40
Viscosity of product (mPa·s):	70,000 ± 5,000
Damp abrasion DIN 53778 (cycles):	> 15,000
Taber abrasion test after 7 days at 23°C - 50% R.H. CS17 disk, weight 1000 g, loss in weight after 1000 revs. (g):	< 0.1 g (< 1%)
Shore A hardness:	60
Failure load DIN 53504 after 7 days at 23°C (N/mm <sup>2</sup> ):	0.7
Elongation at failure DIN 53504 after 7 days at 23°C (%):	110
Change in colour after 1,000 hours exposure to a Weather-Ometer (according to ASTM G 155 cycle 1):	
- blue:	ΔE < 0.8
- green:	ΔE < 0.5
- sky blue:	ΔE < 0.5
- red:	ΔE < 0.5
- white:	ΔE < 0.5
Vapour diffusion resistance coefficient (UNI EN ISO 7783/2) (μ):	250
Resistance to the passage of vapour of a 0.5 mm thick dry layer S <sub>D</sub> (m) (UNI EN ISO 7783/2):	0.12
Capillary action water absorption coefficient W <sub>24</sub> [(kg/(m <sup>2</sup> ·h <sup>0.5</sup> ))] (UNI EN 1062/3):	0.09
Adhesion to concrete (N/mm <sup>2</sup> ):	2.40
Resistance to fuel (UNICHIM N.394 par. 6.4) ANAS test report 2133/0359/11:	no defects
Resistance to lubricants (UNICHIM N.394 par. 6.3) and engine oil, ANAS test report 2133/0359/11:	no defects
Resistance to saline solution (UNICHIM N.394 par. 6.2), NaCl solution and saturated CaCl <sub>2</sub> ANAS test report 2133/0359/11:	no defects
Skid resistance (sliding friction) (UNI EN 1436) ANAS test report 2133/0359/11, BPN:	62
Skid resistance class (UNI EN 1436):	S4 (SRT ≥ 60)
Resistance to freeze and thaw cycles, 10 cycles (UNI EN 1367-1):	no defects

### PREPARATION

Dilute Mapecoat TNS Urban with approximately 15-20% of water. Mix the product thoroughly before use. Where possible use a drill at low speed to prevent entrapment of air into the product

DRYING:	air
Waiting time before painting over:	12-24 hours under normal conditions of temperature and humidity

Before applying **Mapecoat TNS Urban**, remove all traces of dust from the surface with a vacuum cleaner.

When applying the product on concrete, on dusty substrates, on substrates which are not particularly solid, if you are not sure what material has been used to make the substrate or if the curing time of the substrate is unknown, apply 1 coat of primer **Mapecoat I 600 W** diluted 1:1 with clean water.

#### **Preparation of the product**

Dilute **Mapecoat TNS Urban** with approximately 10-15% of water. Mix the product thoroughly before use. Where possible use a drill at low speed to prevent entrapment of air into the product.

#### **Application of the product**

Apply **Mapecoat TNS Urban** with a rubber trowel.

The cycle comprises the application of at least 3/4 coats of **Mapecoat TNS Urban**. Wait 12-24 hours between each coat in normal temperature and humidity conditions. When applying the product on uneven surfaces or on top of particularly bright colours (lemon yellow, bright red, orange, etc.) which are difficult to cover perfectly, we recommend the following application procedure:

- apply 1 or 2 coats of white **Mapecoat TNS Urban**. The number of coats required depends on the colour of the surface on which the product is applied and/or the degree of cover required;
- apply 2 or 3 coats of **Mapecoat TNS Urban** in the colour selected. In this case, the number of layers depends on the intensity of colour required (the colour is brighter if more coats are applied) and the covering capacity of each colour.

Provide adequate protection for surfaces freshly coated with **Mapecoat TNS Urban** before it has completely dried to prevent rain coming into contact with the product and compromising adhesion and final quality.

#### **PRECAUTIONS TO BE TAKEN DURING PREPARATION AND APPLICATION**

Do not apply **Mapecoat TNS Urban** if it is about to rain or in windy weather. Do not apply **Mapecoat TNS Urban** on damp or wet surfaces to prevent compromising adhesion. Do not apply if the temperature is lower than +10°C or higher than +35°C. Do not apply if the level of humidity is higher than 85%.

#### **Cleaning**

Clean tools used to apply **Mapecoat TNS Urban** with water before the product dries.

#### **CONSUMPTION**

2.0-2.5 kg/m<sup>2</sup> (for one basecoat and three top coats).

#### **PACKAGING**

**Mapecoat TNS Urban** is supplied in 20 kg plastic drums.

#### **STORAGE**

24 months if stored in a dry place away from sources of heat at a temperature of between +5°C and +30°C. Protect from frost.

#### **SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION**

**Mapecoat TNS Urban** is not considered hazardous according to current norms and guidelines regarding the classification of mixtures. However, we recommend taking the usual precautions for handling chemical products. If the product is applied in closed environments, make sure the area is well ventilated.

For further and complete information about the safe use of our product please refer to our latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

#### **WARNING**

*Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.*

Please refer to the current version of the Technical Data Sheet, available from our website [www.mapei.com](http://www.mapei.com)

**All relevant references  
for the product are available  
upon request and from  
[www.mapei.com](http://www.mapei.com)**



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Urban**



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