



# Mapecoat TNS Paint

**Coloured coating for sport surfaces, pedestrian areas and cycle lanes**

## DESCRIPTION

**Mapecoat TNS Paint** is a coloured acrylic paint in water dispersion with selected fillers and has been specifically developed in the Mapei Research & Development laboratories as a topcoating for **Mapecoat TNS** systems when creating sports surfaces such as tennis, basketball and volleyball courts, 5-a-side football pitches, multi-purpose surfaces, pedestrian zones and cycle lanes.

## WHERE TO USE

- Topcoating for indoor and outdoor surfaces such as basketball and volleyball courts, 5-a-side football pitches, skating rinks, velodromes, multi-sport courts and multi-purpose surfaces.
- Restoring sports surfaces coated with synthetic resin.
- Maintaining and colouring surfaces made of pervious concrete for tennis courts and multi-sport playing surfaces.
- As a topcoating and for colouring the surface of pedestrian zones and cycle lanes, with a cementitious substrate, including pervious concrete, and in bitumen conglomerate.

## TECHNICAL CHARACTERISTICS

**Mapecoat TNS Paint** is a coloured acrylic paint in water dispersion with added selected fillers.

Thanks to its special formulation, **Mapecoat TNS Paint** is used as a finishing coat for indoor and outdoor sports surfaces made from acrylic resin that require specific characteristics. **Mapecoat TNS Paint** is particularly

recommended for sports that require a good balance between athletes' stability and low friction, such as surfaces used for figure and speed skating, velodromes, etc.

When used in combination with other finishing products from the **Mapecoat TNS** line, **Mapecoat TNS Paint** forms a system which provides adequate protection. Its mechanical properties and excellent resistance to abrasion lead to durability of surfaces used frequently. Thanks to its special composition, **Mapecoat TNS Paint** may also be applied on pervious concrete to give it a uniform colour without affecting its initial drainage capacity.

Its high resistance to chemical products potentially harmful to surfaces (such as de-icing salts, oil and fuel, etc.), also make **Mapecoat TNS Paint** suitable for coating large areas, such as those that need to be treated periodically to prevent ice forming and/or for routine cleaning purposes. **Mapecoat TNS Paint** is tested in a Weather-Ometer to simulate severe physical and environmental cycles and is able to resist prolonged exposure to sunlight, particularly ultra-violet rays. It is also resistant to the aggression from smog and various weather conditions. From an aesthetic point of view, the wide range of colours available, along with other shades using the **ColorMap** automatic colouring system, which means personalised colours may also be created.

When used to restore surfaces, **Mapecoat TNS Paint** has excellent high-hide properties and allows work to be completed quickly.



## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

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| <b>Consistency:</b>  | thick liquid   |
| <b>Dry solids content (%):</b>   | approx. 63   |
| <b>Density (g/cm<sup>3</sup>):</b>   | approx. 1.36   |
| <b>Damp abrasion DIN 53778 (cycles):</b>   | > 15,000   |
| <b>Taber abrasion test after 7 days at +23°C and 50% R.H. CS17 disk, 1,000 g weight, loss in weight at 500 revs (g):</b>   | < 0.3  |
| <b>Tensile strength DIN 53504 after 7 days at +23°C (N/mm<sup>2</sup>):</b>  | 1.0  |
| <b>Tensile strength DIN 53504 after 7 days at +23°C</b>  | 340  |
| <b>Variation of colour after exposure 1000 hours exposure to a Weather-Ometer (according to ASTM G 155 cycle 1):</b><br>– blue:<br>– green:<br>– light blue:<br>– red:<br>– white: | <br>$\Delta E < 0.8$<br>$\Delta E < 0.5$<br>$\Delta E < 0.5$<br>$\Delta E < 0.5$<br>$\Delta E < 0.5$ |
| <b>Water vapour diffusion resistance coefficient (<math>\mu</math>) (UNI EN ISO 7783-2):</b>   | 2600   |
| <b>Resistance to the passage of water vapour for a 0.15 mm thick dry layer <math>S_D</math> (m) (UNI EN ISO 7783-2):</b>   | 0.39   |
| <b>Capillary action water absorption factor <math>W_{24}</math> [(kg/(m<sup>2</sup>h<sup>0.5</sup>))] (UNI EN 1062-3):</b>   | 0.05   |

### RECOMMENDATIONS

**Mapecoat TNS Paint** may be applied over existing coatings: in such cases the condition of the old coating will need to be checked beforehand, such as its adhesion, its compatibility with **Mapecoat TNS Paint**, by testing it on a small area of the coating. If tests show the old finish is suitable for recoating, the surface must be prepared adequately by washing it with a degreasing product and by lightly sanding to achieve the right roughness before applying **Mapecoat TNS Paint**. It is recommended to contact our Sports System Technology department to check and discuss how to use **Mapecoat TNS Paint** correctly, based on local conditions and type of substrate.

- Do not dilute **Mapecoat TNS Paint** with solvent.
- Do not apply **Mapecoat TNS Paint** directly on dusty, crumbling or weak surfaces.
- Do not apply **Mapecoat TNS Paint** on substrates with oil or grease stains or with stains in general.
- Do not apply **Mapecoat TNS Paint** on surfaces used by heavy-goods vehicles.
- Do not apply **Mapecoat TNS Paint** directly on substrates with water in counter-pressure. In such cases the surface needs to be treated with a suitable product and only after treating the surface should the possibility of applying **Mapecoat TNS Paint** be assessed.

## APPLICATION PROCEDURE

### Preparation of the substrate

**Mapecoat TNS Paint** is a coloured paint used mainly for coating

**Mapecoat TNS Color**, which must be completely dry, uniform and clean and have no defects such as humps or hollows after application. Before applying **Mapecoat TNS Paint**, it is always recommended to go over the surface beforehand with an orbital polisher with a P60 or a P80 abrasive pad so that the substrate is consistent and even and has no unsightly defects.

When applying **Mapecoat TNS Paint** directly on cementitious substrates, once completely dry, treat the surface with adhesion promoter, such as **Mapecoat TNS Primer EPW** diluted 1:0.5 with water.

In the case of cementitious substrates with up to 6% of residual moisture, it is recommended to treat the surface with a suitable chemical barrier prior to applying the product, such as **Triblock P** three-component epoxy-cementitious primer. Apply the first coat of **Mapecoat TNS Paint** within 24 hours of applying **Mapecoat TNS Primer EPW** and within 36 hours if a **Triblock P** chemical barrier has been applied. New surfaces requiring treatment, or areas patched up with repair mortar, must be well-cured, perfectly clean, compact and dry.

In the case of substrates made from bitumen conglomerate, the surface must be clean, there must be no loose material and there must be no traces of oil, fuel or any other material or substance that could affect the soundness of the substrate.

In the case of particularly deteriorated or dirty areas of asphalt, it may be necessary to remove these areas and then repair them with **Mape-Asphalt Repair 0/8** cold-applied reactive asphalt. Then, before applying **Mapecoat TNS Paint**, any traces of dust or dirt on the surface must be vacuumed off or removed. Before applying **Mapecoat TNS Paint**, substrates made from bitumen conglomerate must be cured and oxidised for at least 15 days. **Mapecoat TNS Paint** may be applied directly on new bitumen conglomerate without priming the surface beforehand.

### Substrate preparation for surfaces in porous concrete

Clean this type of surface with a high-pressure hose to remove any dirt and loose areas of material. Follow the instructions in the previous section "Substrate preparation" before applying **Mapecoat TNS Primer EPW** and then **Mapecoat TNS Paint** by spray. Seal all control joints with **Mapefoam** and **Mapeflex PU 45 FT**.

### Preparation of the product

Dilute **Mapecoat TNS Paint** with maximum 5-10% of water, depending on the environment temperature, the temperature of the substrate and the weather conditions during application. Mix the product well before use with a drill at low-speed, taking care to avoid entraining air into the product.

### Application of the product

Apply **Mapecoat TNS Paint** with a rubber or steel trowel, by roller, preferably a 5 mm mohair roller, or by airless spray. The full cycle generally includes the application of 1 coat of **Mapecoat TNS Paint** if used as a finishing coat after applying a coat of **Mapecoat TNS Color**, or 2 coats if used to refurbish a playing surface. When particularly bright colours are applied (lemon yellow, bright red, orange etc.), and in order to achieve the necessary coverage, more than 2 coats may be required.

As soon as the surfaces have been coated, they should be protected from rain to prevent **Mapecoat TNS Paint** coming into contact with water during its initial drying phase, otherwise its adhesion and the overall quality of the work may be affected.

### PRECAUTIONS TO BE TAKEN DURING PREPARATION AND APPLICATION

Do not apply **Mapecoat TNS Paint** if it is about to rain or in windy weather.

Do not apply **Mapecoat TNS Paint** on damp or wet surfaces; it may not adhere correctly.

Do not apply if the temperature is lower than +10°C or higher than +35°C.

Do not apply if the temperature of the substrate is higher than +35°C.

Do not apply when humidity is above 85%.

### Cleaning

Clean tools used to apply the product with water. Once dry, **Mapecoat TNS Paint** may only be removed mechanically. Clean all tools and equipment thoroughly immediately after applying the product, particularly spray pumps.

### CONSUMPTION

The consumption rate for **Mapecoat TNS Paint** is heavily influenced by the absorption and roughness of the substrate and by the application method used. When applied with a rubber trowel on even surfaces coated with **Mapecoat TNS Color**, the consumption rate is around 0.20 ÷ 0.25 kg/m<sup>2</sup> per coat. When applied by spray over porous concrete, the consumption rate is around 0.30 ÷ 0.40 kg/m<sup>2</sup> per coat.

### PACKAGING

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

### STORAGE

24 months 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

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website [www.mapei.com](http://www.mapei.com).

PRODUCT FOR PROFESSIONAL USE.

### WARNING

*Although the technical details and recommendations contained in this product*

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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)

#### LEGAL NOTICE

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

