



# Mapecoat TNS Grey Base Coat

## Acrylic waterborne textured and fortified base coating for multisport and tennis courts

### DESCRIPTION

**Mapecoat TNS Grey Base Coat** is a flexible, textured and fortified waterborne acrylic basecoat for both indoor and outdoor surfaces to prepare bitumen and cementitious surfaces before applying additional **Mapecoat TNS** products.

**Mapecoat TNS Grey Base Coat**, thanks to the enhanced formulation designed at R&D Lab, is combined with **Mapecoat TNS** system products to improve shock absorption and to reduce body impact, therefore it is suitable for a wide variety of applications.

### WHERE TO USE

- Basecoat for indoor and outdoor sport surfaces to prepare bitumen and cementitious surfaces before applying additional **Mapecoat TNS** products.
- Basecoat over existing acrylic, polyurethane or epoxy surfaces before applying additional **Mapecoat TNS** products.
- Basecoat to compensate for an uneven or rough substrate prior to applying additional **Mapecoat TNS** products.
- To locally pre-coat depressed areas and crack/hole repairs not exceeding 3 mm of thickness to achieve better planarity.
- Basecoat to add resilience when compared with standard acrylic systems.

### TECHNICAL CHARACTERISTICS

**Mapecoat TNS Grey Base Coat** is a cushion base coat for outdoor surfaces composed of a balanced mixture of acrylic waterborne resins in combination with recycled rubber granules.

Thanks to the enhanced bond strength, **Mapecoat TNS Grey Base Coat** may be applied on both coated existing surfaces and new surfaces which require for a brand-new installation.

**Mapecoat TNS Grey Base Coat** applied on high porosity substrates, thanks to the filling properties, leads to even and smooth surface, enhancing and controlling therefore the consumption of following layers of **Mapecoat TNS**.

**Mapecoat TNS Grey Base Coat** is a flexible coating product which, when used in combination with **Mapecoat TNS** top coatings, leads to a durable and comfortable cushioned system for sport surfaces. Specifically, the enhanced elasticity of the product provides a comfortable feel underfoot, reducing fatigue of players and leading to longer and more frequent use of the court.

### RECOMMENDATIONS

- Prolonged exposure to sunlight should be avoided and limited to the application phase: **Mapecoat TNS Grey Base Coat** shall be overcoated by additional **Mapecoat TNS** coatings.
- Do not dilute **Mapecoat TNS Grey Base Coat** with solvents.

- The substrate must be clean and free of dust, dirt, oil, grease, paint curing agents, concrete sealers, loosely bonded toppings, loose particles, old coating residues and any other substances or condition that may prevent or reduce adhesion.
- Concrete substrates shall be fully cured (at least 28 days and residual humidity lower than 3%), free from hydrostatic pressure, provide for a damp proof membrane and sound for the intended use.
- New asphalt shall be allowed to oxidise for a period of 15 days depending on climatic conditions.
- When applying **Mapecoat TNS Grey Base Coat** on top of existing coatings, preliminary tests shall be carried out in order to ensure an appropriate adhesion is achieved between the layers.
- When applying **Mapecoat TNS Grey Base Coat** on concrete or cementitious substrates, priming with **Mapecoat TNS Primer EPW** is mandatory, or eventually with **Triblock P** in case of residual humidity between 4 and 6%.
- Do not apply when it is about to rain or in windy weather.
- Do not apply over damp or wet surfaces.
- The substrate temperature shall be between +10°C and +50°C.
- Do not apply if the ambient temperature is lower than +10°C or the humidity is higher than 85%.

## APPLICATION PROCEDURE

### Preparation of the concrete substrate

The substrate must be clean and free of dust, dirt, oil, grease, paint curing agents, concrete sealers, loosely bonded toppings, loose particles, old coating residues and any other substances or condition that may prevent or reduce adhesion. The substrate strength must be adequate to the intended use and comply with Sport Associations and Federations guidelines, if any.

Any cracks present in the concrete substrate shall be repaired by an appropriate filling product such as the epoxy resin for injections, **Eporip**. If any area needs to be both restored and levelled, proceed by using cementitious mortars from the **Mapegrout** or **Planitop** range. Control joints needs to be sealed by installation of **Mapefoam** and **Mapeflex PU 45 FT** or **Mapeflex PU40**, in addition to **Quartz 0.5** broadcast on the surface.

In case of bituminous substrate, cracks shall be filled and repaired by using reactive products such as **Ultrabond Turf 2 Stars Pro**, **Ultrabond Turf 2 Stars** or **Ultrabond Turf PU 2K**. In presence of depressions up

to 2 cm deep, a balanced mix of the above mentioned products (**Ultrabond Turf**) and 15-20% on weight of silica sand **Quartz 0.9** is suggested. Broadcast the surface with **Quartz 0.5** or **Quartz 0.9** while still fresh, making sure that it is completely saturated. Heavily damaged and worn out asphalt shall be removed and replaced by a fresh lay, eventually with the ready-to-use reactive product **Mapeasphalt repair 0/8**.

## Product preparation

**Mapecoat TNS Grey Base Coat** is applied as it is or diluted with water up to 15% (maximum) according to the application method used. The use of a low-speed mechanical mixer is recommended. The mixture should be stirred until it reaches a homogenous consistency, avoiding entrapping air. Periodical remixing during the application process is recommended in order to keep the mixture homogeneous.

## Application of the product

Apply **Mapecoat TNS Grey Base Coat** with a metal or rubber squeegee such as **Spatola 65** for **Mapecoat TNS**). Application of 1-2 coats of **Mapecoat TNS Grey Base Coat** is recommended, depending on the coating system chosen. Wait 12-24 hours prior overcoating, at +23°C and 50% humidity.

## Cleaning

Clean tools with water while the product is still fresh/wet. After drying, **Mapecoat TNS Grey Base Coat** shall be removed mechanically.

## CONSUMPTION

The consumption of **Mapecoat TNS Grey Base Coat** may vary according to the substrate roughness and absorbency and the application technique used. In presence of even substrate, average consumption is as follows:

- bitumen conglomerate (wear layer), approximately 1 kg/m<sup>2</sup>
- smooth cementitious and non-absorbent surface, approximately 0.5 kg/m<sup>2</sup>

*Average consumption if a second coat is applied is approx. 0.500 kg/m<sup>2</sup>.*

## PACKAGING

**Mapecoat TNS Grey Base Coat** is supplied in 20 kg plastic drums.

## STORAGE

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

## 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.

## TECHNICAL DATA (typical values)

### DESCRIPTION

Flexible acrylic waterborne resin basecoat with selected fillers for multi-sports and tennis courts

### PRODUCT IDENTITY

**Consistency:** thick liquid

**Dry solids content (%):** approx. 75

**Density (g/cm<sup>3</sup>):** approx. 1.40

**Damp abrasion (DIN 53778) (cycles):** 10,000

**Failure load (DIN 53504) after 7 days at +23°C (N/mm<sup>2</sup>):** > 0.50

**Elongation at failure (DIN 53504) after 7 days at +23°C (%):** 63

**Change in colour after 1,000 hours exposure to a Weather-Ometer (according to ASTM G 155 cycle 1) grey colour:**  $\Delta E < 0.5$

**Vapour diffusion resistance coefficient ( $\mu$ ) (EN ISO 7783/2):** 600

**Resistance to passage of vapour for a 0.5 mm thick dry layer  $S_D$  (m) (EN ISO 7783/2):** 0.3

**Capillary action water absorption coefficient  $W_{24}$  [kg/(m<sup>2</sup>·h<sup>0.5</sup>)] (EN ISO 1062/3):** 0.08

**Bond strength to concrete (N/mm<sup>2</sup>):** > 0.8

### PREPARATION

**Mapecoat TNS Grey Base Coat** is applied as it is or diluted with 5 to 15% (maximum) of water according to the application method used

**DRYING:** open air

**Ready to overcoat:** 12-24 hours at +23°C and 50% relative humidity. Low temperatures and high humidity will extend drying time

# Mapecoat TNS Grey Base Coat



## 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)

## LEGAL NOTICE

The contents of this Technical Data

Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website [www.mapei.com](http://www.mapei.com).

**ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.**

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

