

# MAPECOAT TNS GREY BASE COAT

Flexible, acrylic resin-based middle layer with selected SBR rubber granules for multi-layer systems from the Mapecoat TNS range



## DESCRIPTION

**Mapecoat TNS Grey Base Coat** is a flexible middle layer combined with SBR rubber granules (grain size from 0 to 0.4 mm), which is used in **Mapecoat TNS Cushion**, **Mapecoat TNS Cushion REC**, **Mapecoat TNS Cushion PRO**, **Mapecoat TNS Cushion ELITE** systems.

**Mapecoat TNS Grey Base Coat** is ideal for levelling off small hollows, if present on the surfaces.

## WHERE TO USE

- Flexible middle layer for increasing comfort compared to traditional acrylic systems.
- Flexible middle layer for the creation of **Mapecoat TNS Cushion** system.
- Flexible middle layer for the creation and levelling of **Mapecoat TNS Cushion REC**, **Mapecoat TNS Cushion PRO** and **Mapecoat TNS Cushion ELITE** systems.
- Flexible basecoat for the preparation of new sports surfaces on bituminous or cementitious substrates.
- Flexible basecoat for localised repairs on hollows up to 3 mm deep.
- Flexible basecoat for the preparation of existing acrylic or polyurethane sports surfaces.
- Flexible basecoat for the preparation of outdoor urban flooring.
- Flexible basecoat to improve the flooring's flatness and resilience.

## RECOMMENDATIONS

- Do not dilute **Mapecoat TNS Grey Base Coat** with solvents.
- Do not apply **Mapecoat TNS Grey Base Coat** directly on dusty, crumbling or weak surfaces.
- Do not apply **Mapecoat TNS Grey Base Coat** on substrates with oil or grease stains or with stains in general.
- During the application phase, avoid prolonged exposure to sunlight as much as possible: **Mapecoat TNS Grey Base Coat** must be covered with further coatings from **Mapecoat TNS** range.
- The concrete substrate must be completely cured (min. 28 days with residual moisture under 3%) and free from rising damp. In case of new concrete substrates, apply a suitable vapour barrier.
- New asphalt substrates must be cured for at least 15-20 days, according to climatic conditions, to allow correct oxidation.

- Do not use **Mapecoat TNS Grey Base Coat** in combination with quartz with high moisture content or high impurity content, since this could alter the mix and compromise the durability and ease of application.
- Do not use **Mapecoat TNS Grey Base Coat** on substrates with water in counter-pressure. In this cases a suitable treatment of the surface with specific products must be carried out and only after the treatment the application of **Mapecoat TNS Grey Base Coat** can be evaluated, if possible.
- **Mapecoat TNS Grey Base Coat** may only be applied over other finishing products after carefully checking the state of the old layer and after carrying out preliminary tests to verify their compatibility and that there is good adhesion between the old finishing product and **Mapecoat TNS Grey Base Coat**.
- It is possible to apply **Mapecoat TNS Grey Base Coat** on cementitious substrates only after priming.
- Do not apply if it is about to rain or in windy weather.
- Do not apply on damp or wet surfaces.
- The temperature of the substrate must be between +10°C and +50°C.
- Do not apply at temperatures lower than +10°C or higher than +35°C.
- Do not apply when humidity is above 85%.

## APPLICATION PROCEDURE

### Preparation of the substrate

Before applying **Mapecoat TNS Grey Base Coat** the substrate must be flat, clean and free from dust, dirt, oil, grease, wax, old detaching coating residues and from any other substance or condition which could compromise or reduce the adhesion of the product. The substrate's mechanical strength must comply with its intended use and with the respective Sports Associations and Federations guidelines, if present.

#### Concrete substrates

The surface of the floor must be prepared with suitable power tools (e.g. shot-blasting or grinding with a diamond disk) to remove all traces of dirt, cement laitance and crumbling or detached portions and to make the surface slightly rough and absorbent. Before applying the product remove all dust from the surface with a vacuum cleaner.

As an alternative to the mechanical treatment described above, in case of smooth and low-absorbency surfaces, rinse with a solution of clean water and 5-10% **UltraCare HD Cleaner**. Spread the solution on the whole surface using a brush or a rotating cleaning machine and then rinse again with plenty of water (for further information please refer to **UltraCare HD Cleaner** Technical Data Sheet).

In order to grant the correct adhesion of **Mapecoat TNS Grey Base Coat**, a suitable primer must be applied on the dry substrate. In case of substrates with residual moisture up to 3% use **Mapecoat TNS Primer EPW**. In presence of residual moisture from 3 to 6%, apply a suitable chemical barrier using **Triblock P** three-component epoxy-cementitious primer.

Apply the first coat of **Mapecoat TNS Grey Base Coat** within 24 hours of applying **Mapecoat TNS Primer EPW** and within 36 hours if a **Triblock P** chemical barrier has been applied.

Repair any cracks in the surface using epoxy resins such as **Eporip**, **Eporip Turbo**, **Epojet** or equivalent Mapei products. If necessary, repair areas of concrete with cementitious mortars from the **Mapegrout** or **Planitop** range or equivalent Mapei products.

Expansion joints must be sealed by applying **Mapefoam** and **Mapeflex PU 45 FT**, **Mapeflex PU 40** or equivalent Mapei products, broadcasting with **Quartz 0.5** while the sealant is still fresh.

#### Bituminous substrates

Fill and repair any cracks using fillers for high thickness applications such as **Ultrabond Turf 2 Stars**, **Ultrabond Turf 2 Stars Pro** or **Ultrabond Turf PU 2K** (two-component quick-drying products).

In the presence of hollows up to 2 cm deep, the use of a balanced mix of the above-mentioned products (**Ultrabond Turf**) and 15-20% by weight of dry silica sand **Quartz 0.9** is recommended. Broadcast **Quartz 0.5** or **Quartz 0.9** on the surface while it is still fresh, making sure it is completely saturated.

Badly damaged and worn asphalt must be removed and replaced by applying **Mape-Asphalt Repair 0/8**.

### Preparation of the product

- Mix **Mapecoat TNS Grey Base Coat** in its original packaging with a suitable electric mixer fitted with a mixing attachment at low speed to avoid entraining air into the product.

- Dilute **Mapecoat TNS Grey Base Coat** with water and mix for at least 2 minutes until an even mix is obtained. It is recommended to keep the mix well blended during the application phase repeating the mixing operation.

Mapecoat TNS Grey Base Coat	Water amount
20 kg	from 3 to 4 l

### Application of the product

**Mapecoat TNS Grey Base Coat** may be applied based on the chosen system, according to the table below:

Type of application	Number of coats
Flexible basecoat	1 or 2 coats (according to the porosity of the substrate)
Flexible middle layer for Mapecoat TNS Cushion system	3 coats
Flexible middle layer for levelling Mapecoat TNS Cushion REC, Cushion PRO, Cushion ELITE systems	1 coat

Apply **Mapecoat TNS Grey Base Coat** with a rubber trowel (50 or 70 Shore hardness such as Trowel 65 for Mapecoat TNS) or a metal trowel.

## CONSUMPTION (referred to one coat of undiluted product)

Type of application	Final consumption on porous substrates	Final consumption on non-porous substrates
Flexible basecoat	approx. 1-1.2 kg/m <sup>2</sup>	approx. 0.4-0.6 kg/m <sup>2</sup>
Flexible middle layer for Mapecoat TNS Cushion system	-	approx. 0.4-0.6 kg/m <sup>2</sup>
Flexible middle layer for levelling Mapecoat TNS Cushion REC, Cushion PRO, Cushion ELITE systems	approx. 0.6-0.8 kg/m <sup>2</sup>	-

## DRYING

In 12-24 hours at +23°C and 50% humidity.

Always check drying times based on weather conditions (high or low temperatures, potential shadow areas, high or low humidity percentage), which strongly affect drying and re-coat times.

## CLEANING

Clean tools with water while the product is still fresh. Once dried, **Mapecoat TNS Grey Base Coat** must be removed using mechanical means.

## PACKAGING

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

## STORAGE

**Mapecoat TNS Grey Base Coat** remains stable for 24 months if stored in a dry place away from sources of heat at a temperature of +5°C to +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 SDS available from our website [www.mapei.com](http://www.mapei.com).

PRODUCT FOR PROFESSIONAL USE.

## TECHNICAL DATA (typical values)

### DESCRIPTION

Flexible, acrylic resin-based middle layer with selected SBR rubber granules for multi-layer systems from the Mapecoat TNS range

### PRODUCT IDENTITY

Consistency:	thick liquid
Dry solids content:	approx. 75%
Bulk density:	approx. 1.40 g/cm <sup>3</sup>
Damp abrasion (DIN 53778):	10,000 cycles
Elongation at break (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:	$\Delta E < 0.5$
Water-vapour transmission resistance (EN ISO 7783/2):	600 $\mu$
Resistance to water vapour for 0.5 mm dry thickness S (EN ISO 7783/2):	0.3 m
Water absorption due to capillary action W <sub>24</sub> (EN 1062-3):	0.08 kg/(m <sup>2</sup> ·h <sup>0.5</sup> )
Adhesion to concrete:	> 0.8 N/mm <sup>2</sup>

### Preparation

Dilute **Mapecoat TNS Grey Base Coat** with 15-20% of water depending on the application method

### DRYING:

by air

### Recoat time:

12-24 hours at +23°C and 50% RH. Low temperatures and high level of humidity will increase drying time

## 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.*

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

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