

MAPECOAT TNS FINISH 1.3.4

Coloured acrylic resin-based coating product in water dispersion with selected fillers for indoor and outdoor tennis courts and multi-purpose playing surfaces, certified by the ITF (International Tennis Federation)



Some application examples

New indoor and outdoor tennis courts and for overlaying existing resin courts. Basketball, volleyball and handball courts, 5-a-side football pitches, etc.

TECHNICAL CHARACTERISTICS

Mapecoat TNS Finish 1.3.4 is a coating product made from a balanced mix of acrylic resins in water dispersion and selected fillers.

Mapecoat TNS Finish 1.3.4 may be applied on both existing asphalt and concrete substrates coated with resin and on new surfaces which require coating.

Mapecoat TNS Finish 1.3.4 is available in three court-pace categories (1, 3 and 4) and is certified by the ITF (International Tennis Federation):

- **Mapecoat TNS Finish 1** (category 1, slow pace) for coating surfaces with a layer that is moderately soft and elastic under foot to create a pleasant playing surface for both new players and enthusiasts of the game. It is the ideal surface for schools and tennis academies and for children who are learning to play.
- **Mapecoat TNS Finish 3** (category 3, medium pace) which, thanks to a special mixture of selected fillers, forms a layer that becomes progressively more compact and provides a pace to the game that represents a good compromise between slow and fast pace surfaces, an ideal “compromise” for those who prefer either slower or faster surfaces.
- **Mapecoat TNS Finish 4** (category 4, medium-fast pace) forms a layer that is less elastic and becomes progressively more compact, allowing play to be faster and to meet the requirements of more expert tennis player.

For each of the three categories, **Mapecoat TNS Finish** is characterised by its excellent technical performance characteristics, providing a perfect bounce of the ball and safe, secure changes in direction for players.

Mapecoat TNS Finish 1.3.4 has excellent resistance to abrasion and guarantees the durability of surfaces, even when used frequently.

Mapecoat TNS Finish 1.3.4 is an elastic finishing product which cushions jumps, and guarantees a soft, safe landing.

Mapecoat TNS Finish 1.3.4 is resistant to all types of climates, aggression from smog and sunlight and offers hard-wearing, durable protection for substrates.

Mapecoat TNS Finish 1.3.4 is available in 24 colours from the standard colour chart and according to individual samples using the **ColorMap**® automatic colouring system.

RECOMMENDATIONS

Do not dilute **Mapecoat TNS Finish 1.3.4** with solvents.

Do not apply **Mapecoat TNS Finish 1.3.4** directly on dusty, crumbling or incoherent surfaces.

Do not apply **Mapecoat TNS Finish 1.3.4** on substrates polluted with oil, grease or dirt in general.

Mapecoat TNS Finish 1.3.4 must not be applied directly on substrates with water in counter-pressure. With these types of substrate, a suitable product must be applied to treat the surface, and only after applying such a product should the possibility of coating the surface with **Mapecoat TNS Finish 1.3.4** be assessed.

Mapecoat TNS Finish 1.3.4 may only be applied on top of other finishing products after carefully checking the state of the original layer, and after carrying out preliminary tests to verify that they are compatible and that there is good adhesion between the existing finish and **Mapecoat TNS Finish 1.3.4**.



APPLICATION PROCEDURE

Substrate preparation

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

Any cracks in the substrate must be repaired by filling them with **Eporip**. If portions of deteriorated concrete need to be repaired, use a cementitious mortar from the **Mapegrout** range or **Planitop 400**. Before applying **Mapecoat TNS Finish 1.3.4**, vacuum the surface to completely remove all traces of dust.

Finally apply **Mapecoat TNS White Base Coat** or **Mapecoat TNS Grey Base Coat** as described in the system data sheets of **Mapecoat TNS Professional**, **Mapecoat TNS Cushion**, **Mapecoat TNS Comfort**, **Mapecoat TNS Remove** e **Mapecoat TNS Reinforced**.

Preparation of the product

Dilute **Mapecoat TNS Finish 1.3.4** with approximately 10-15% of water.

Mix the product thoroughly before use. Where possible use a variable speed drill at low speed and avoid trapping air in the product.

Application of the product

Apply **Mapecoat TNS Finish 1.3.4** with a rubber trowel.

The application cycle comprises at least 3/4 coats of **Mapecoat TNS Finish 1.3.4**. Wait 12 hours between each coat in normal weather and at normal temperatures.

When applying **Mapecoat TNS Finish** category 3 or 4, we recommend applying a coat of **Mapecoat TNS Finish 1** to even out the substrate before applying 2 to 3 coats of **Mapecoat TNS Finish 3** or **4**.

Make sure surfaces freshly coated with **Mapecoat TNS Finish 1.3.4** are protected sufficiently 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 Finish 1.3.4** if it is about to rain or in windy weather.

Do not apply **Mapecoat TNS Finish 1.3.4** on damp or wet surfaces; it may not adhere correctly.

Do not apply if the temperature is lower than +10°C or higher than +40°C.

Do not apply if the temperature of the substrate is higher than +50°C.

Do not apply if the level of humidity is higher than 85%.

CLEANING

Clean tools used to apply **Mapecoat TNS Finish 1.3.4** with water before the product dries.

CONSUMPTION

· **Mapecoat TNS Finish 1**: approx. 0.5 kg/m² per coat.

· **Mapecoat TNS Finish 3**: approx. 0.4 kg/m² per coat.

· **Mapecoat TNS Finish 4**: approx. 0.3 kg/m² per coat.

N.B. Consumption is heavily influenced by the roughness of the substrate.

PACKAGING

Mapecoat TNS Finish 1.3.4 is supplied in 20 kg plastic drums.

STORAGE

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

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapecoat TNS Finish 1.3.4 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 the latest version of our Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)	
DESCRIPTION	
Coloured acrylic resin-based coating product in water dispersion with selected fillers for indoor and outdoor tennis courts and multi-purpose playing surfaces, certified by the ITF (International Tennis Federation)	
WHERE TO USE	
New indoor and outdoor tennis courts and for overlaying existing resin courts. Basketball, volleyball and handball courts, 5-a-side football pitches, etc.	
CHARACTERISTICS	
Appearance	thick liquid
Dry solids content (%):	70
Density (g/cm ³):	approx. 1.40
Viscosity of product (mPa·s):	19,000 ± 1,000
Damp abrasion DIN 53778 (cycles):	> 15,000
Taber abrasion Test after 7 days at +23°C - 50% R.H. - H22 disk, 500 revs/1,000 g (loss in weight):	2.8 g (6%)
Taber abrasion Test after 7 days at +23°C - 50% R.H. - CS17 disk, 1,000 revs (loss in weight):	< 0.1 g after 1000 revs (Mapecoat TNS Finish 1) < 0.2 g after 500 revs (Mapecoat TNS Finish 3) < 0.2 g after 500 revs (Mapecoat TNS Finish 4)
Shore A hardness:	60
Tensile strength (DIN 53504) – after 7 days at +23°C (N/mm ²):	0.7 (Mapecoat TNS Finish 1) 0.5 (Mapecoat TNS Finish 3) 0.5 (Mapecoat TNS Finish 4)
Elongation at failure (DIN 53504) – after 7 days at +23°C (%):	140 (Mapecoat TNS Finish 1) 115 (Mapecoat TNS Finish 3) 115 (Mapecoat TNS Finish 4)
Change in colour after 1,000 hours exposure to a Weather-Ometer (according to ASTM G 155 cycle 1): – blue: – green: – sky blue: – red: – white:	$\Delta E < 0.8$ $\Delta E < 0.5$ $\Delta E < 0.5$ $\Delta E < 0.5$ $\Delta E < 0.5$
Vapour diffusion resistance coefficient (μ) (UNI EN ISO 7783):	250 (Mapecoat TNS Finish 1) 800 (Mapecoat TNS Finish 3) 950 (Mapecoat TNS Finish 4)
Resistance to the passage of vapour for a 0.5 mm thick dry layer S_D (m) (UNI EN ISO 7783):	0.12 (Mapecoat TNS Finish 1) 0.40 (Mapecoat TNS Finish 3) 0.47 (Mapecoat TNS Finish 4)
Capillary action water absorption coefficient W_{24} [kg/(m ² h ^{0.5})] (UNI EN 1062-3):	0.09 (Mapecoat TNS Finish 1) 0.04 (Mapecoat TNS Finish 3) 0.02 (Mapecoat TNS Finish 4)

PREPARATION	
Dilute Mapecoat TNS Finish 1.3.4 with approximately 10-15% of water. Mix the product thoroughly before use. Where possible use a variable speed drill at low speed and avoid entraining air into the product.	
DRYING:	by air
Waiting time before re-coating:	24 hours under normal conditions of temperature and humidity

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

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The most up-to-date TDS can be downloaded from our website www.mapei.com.

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