



Mapecoat TNS Color

Super-fine-textured coloured coating for sports surfaces

DESCRIPTION

Mapecoat TNS Color is an acrylic resin in water dispersion with selected micro-fillers specifically formulated in the Mapei Research & Development laboratories and is used as a coloured top coating in **Mapecoat TNS** systems to create sports surfaces such as basketball courts, volleyball courts, 5-a-side football pitches and multi-purpose sports surfaces in general.

TYPICAL AREAS OF USE

- As a top coating for indoor and outdoor surfaces such as basketball courts, skating rinks, velodromes, multi-sport courts and multi-purpose surfaces.
- As a filler and preparation layer prior to application of a top coating of **Mapecoat TNS Paint**.
- As a base filler and preparation layer for **Mapecoat TNS RP** PVC mat.
- To make and restore sports surfaces coated with synthetic resin.

TECHNICAL CHARACTERISTICS

Mapecoat TNS Color is a fine-textured, coloured acrylic filler and top coating product in water dispersion. Thanks to the carefully selected micro-fillers used to formulate **Mapecoat TNS Color**, when used as a top coating layer, apart from acting as a filler, it also gives sports surfaces a slip-resistant finish, including outdoor sports surfaces. **Mapecoat TNS Color** may be used as an intermediate preparation layer before applying other top coating products, such as **Mapecoat TNS**

Paint and **Mapecoat TNS Protection**. One of the other many uses of **Mapecoat TNS Color** is to finish off multi-layered coating systems in the **Mapecoat TNS** range to make them suitable for playing different types of sport. According to tests carried out with a Weather-Ometer to simulate severe climatic conditions, **Mapecoat TNS Color** is resistant to long periods of exposure to direct sunlight, particularly UV rays, and is also highly resistant to aggression caused by smog and various climatic conditions. From an aesthetic point of view, the wide range of colours available, combined with other shades available using the **ColorMap** automatic colouring system, allows personalised colours to be created. When used to restore **Mapecoat TNS Color** has excellent defect-covering properties.

RECOMMENDATIONS

Mapecoat TNS Color may be applied directly over old resin coatings. In such cases, the condition of the old finish needs to be checked beforehand, such as its bond strength, as well as its compatibility with **Mapecoat TNS Color** by testing it on a small area. If tests show the old finish is suitable for recoating, the surface must be prepared accordingly by washing it with a degreasing product followed by a light sanding to make the application surface as rough as possible before applying **Mapecoat TNS Color**. It is recommended to contact the Sports System Technology Division to check and discuss the most appropriate way of using **Mapecoat TNS Color**, according to local application conditions and type of substrate.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Consistency: thick liquid

Dry solids content (%): approx. 68

Density (g/cm³): approx. 1.4

Wet 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 500 revs. (g): < 0.2

Failure load DIN 53504 after 7 days at 23°C (N/mm²): 0.6

Elongation at failure DIN 53504 after 7 days at +23°C (%): 285

Change in colour after 1,000 hours exposure to a Weather-Ometer (according to ASTM G 155 cycle 1):

- blue: $\Delta E < 0.8$
- green: $\Delta E < 0.5$
- sky blue: $\Delta E < 0.5$
- red: $\Delta E < 0.5$
- white: $\Delta E < 0.5$

Vapour diffusion resistance coefficient (μ) (EN ISO 7783-2): 1450

Resistance to the passage of vapour of a 0.20 mm thick dry layer S_D (m) (EN ISO 7783-2): 0.29

Capillary action water absorption coefficient W_{24} [(kg/(m²·h^{0.5}))] (EN 1062-3): 0.03

- Do not dilute **Mapecoat TNS Color** with solvents.
- Do not apply **Mapecoat TNS Color** directly on dusty, crumbling or weak surfaces.
- Do not apply **Mapecoat TNS Color** on dirty substrates or on substrates with oil or grease stains.
- Do not apply **Mapecoat TNS Color** on surfaces with water in counterthrust. In such cases, the substrate needs to be treated beforehand by employing the most appropriate technical solutions and then checked to evaluate if **Mapecoat TNS Color** is suitable for application.

APPLICATION PROCEDURE

Substrate preparation

Mapecoat TNS Color is a coloured top coating which is usually applied over **Mapecoat TNS Base Color**, which must be completely dry, even, clean and free of

surface defects, such as peaks and hollows. Before applying **Mapecoat TNS Color**, it is recommended to go over the surface with an orbital polisher with a P60 or P80 abrasive pad so that the substrate is consistent and even and has no unsightly defects. When applying **Mapecoat TNS Color** directly on cementitious substrates, treat the surface of the dry substrate beforehand with a suitable adhesion promoter, such as **Mapecoat TNS Primer EPW** diluted 1:0.5 with water. In the case of substrates with a residual moisture content of up to 6%, it is recommended to treat the surface with a suitable chemical barrier, such as **Triblock P** three-component cementitious primer.

Apply the first coat of **Mapecoat TNS Color** within 24 hours of applying **Mapecoat TNS Primer EPW** and within 36 hours if **Triblock P** chemical barrier has been applied. New surfaces, and surfaces that have been patched-up with repair mortar, must be fully cured, perfectly clean, sound and dry. In

the case of substrates made from bitumen conglomerate, the surface must be clean with 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, these areas may need to be removed and then repaired with **Mape-Asphalt Repair 0/8** cold-applied reactive asphalt. Before applying **Mapecoat TNS Color**, remove any traces of dust or dirt from the surface with a vacuum cleaner or with other means. Before applying **Mapecoat TNS Color**, cure and oxidise bitumen conglomerate substrates for at least 15 days. **Mapecoat TNS Color** may be applied directly on new bitumen conglomerate without the need for primer.

Preparation of the product

Dilute **Mapecoat TNS Color** with up to 5-10% of water, depending on the surrounding temperature, the temperature of the substrate and the weather conditions at the time of 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 Color** with a rubber squeegee (such as Spatola 65 for **Mapecoat TNS**, durometer 50 to 70) or steel trowel, a roller specific, preferably a 5 mm mohair roller, or, for certain types of application, by HVLP (High Volume Low Pressure) spray. The cycle generally consists of the application of 1 coat of **Mapecoat TNS Color**, if used as an intermediate preparation layer, or of 2 coats if used as a final top coating. When applying particularly bright/clean colours (lemon yellow, bright red, orange, etc.), more coats may be required to reach the level of coverage required.

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

PRECAUTIONS TO BE TAKEN DURING PREPARATION AND APPLICATION

Do not apply **Mapecoat TNS Color** if it is about to rain or in windy weather.
Do not apply **Mapecoat TNS Color** on damp or wet surfaces; adhesion could be affected.
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 +50°C.
Do not apply if the level of humidity is higher than 85%.

Cleaning

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

CONSUMPTION

The consumption rate for **Mapecoat TNS Color** is heavily influenced by the absorption and roughness of the substrate and by the application method used. For even substrates coated with **Mapecoat TNS Base Color**, the consumption rate for application by trowel is around $0.25 \div 0.30 \text{ kg/m}^2$ per coat. The cycle consists of the application of 1 coat of **Mapecoat TNS Color**, if used as an intermediate preparation layer, or of 2 coats if used as a final finish.

PACKAGING

Mapecoat TNS Color is supplied in 20 kg plastic tubs.

STORAGE

24 months if stored in a dry place away from sources of heat at +5°C to +30°C. Protect from freezing weather.

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.

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

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.

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



