

MasterTop[®] TC 442W

2K-PU-top coat, water borne, non-solvented, elastic, UV-stable, matt, clear or pigmented, low emission

DESCRIPTION

MasterTop TC 442W is a water borne, non-solvented, low emission, clear or pigmented 2K-PU top coat which cures to a matt finish.

- good adhesion to non-porous substrates
- low viscosity
- easy to clean and maintain

TYPICAL APPLICATIONS

MasterTop TC 442W is designed, for use as a wear resistant clear or pigmented top coat on semi-rigid polyurethane system, **MasterTop 1324**.

PACKAGING AND COLORS

MasterTop TC 442W is supplied in 10kg working packs and available in a wide range of RAL and NCS colours. For more information, please consult your local sales office.

ADVANTAGES

- matt finish
- NMP, APEO, VOC, glycol- and solvent free
- very low emission (according AgBB)
- abrasion resistant
- improves scratch and wear resistance
- UV- stable

TYPICAL PROPERTIES*

Mix ratio			4 : 1
Solid content		clear pigmented	43% 47%
Density	clear at 23°C	Part A Part B mixed	1.05 g/cm ³ 1.13 g/cm ³ 1.07 g/cm ³
	pigmented at 23°C	Part A Part B mixed	1.14 g/cm ³ 1.13 g/cm ³ 1.14 g/cm ³
Working time		at 20°C	45 min
Ambient and substrate temperature			min. 10°C max. 30°C
Re-coating interval		at 20°C	min. 12 h max. 24 h
Light pedestrian traffic		at 12°C / 50% r.h. at 23°C / 50% r.h. at 30°C / 50% r.h.	24 h 18 h 12 h
Fully cured		at 23°C	5 d
Max. relative humidity			min. 30% max. 80%
Surface properties			matt, light structure

*The above figures are intended as a guide only and should not be used as a basis for specifications.

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APPLICATION GUIDELINES

MasterTop TC 442W is supplied in working packs which are pre-packaged in the exact ratio. Before mixing, pre-condition both PTA and PTB to a temperature of approximately 15 to 25°C. Pour the entire contents of PTA and PTB into a clean pail.

DO NOT MIX BY HAND.

Mix with a mechanical drill and paddle at a low speed (ca. 300 rpm) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles.

DO NOT WORK OUT OF THE CONTAINER USED FOR MIXING. After proper mixing to a homogeneous consistency pour the mixed PTA and PTB into a fresh container and mix for another minute.

As with all water borne sealers, it is important to avoid dry edges by always working wet in wet when overlapping otherwise roller marks will be visible in the final finish. Use a max. 40 cm, medium nap roller, start in the middle of one of the short sides of the floor. Dip the roller into the mixed material and roll out a strip of **MasterTop TC 442W**, parallel to the wall out to one of the corners. Dip the roller into the material once again and roll out a second strip from the starting point out to the other corner. Move backward and repeat these steps, overlapping the first strip by a few cm.

Use a second roller, starting in one corner; back roll the **MasterTop TC 442W**, without stopping, to the other corner. Offset the roller by 10-20cm and roll over, again without stopping, to the opposite wall. Always roll in the same direction, do not back roll in a criss-cross pattern. When almost all the laid material has been back rolled, lay two more strips and back roll as described above. Using this method, the period between the overlapping should not exceed 1-4 minutes and visible roller marks will be minimized. Depending on the application method and quantity, **MasterTop TC 442W** can have a light structure, without influence on the final properties.

MasterTop TC 442W dries primarily by evaporation of water followed by a chemical cross-linking reaction. Therefore, when applying **MasterTop TC 442W**, the ambient temperature and humidity is of importance. High humidity (especially in combination with low temperatures) slows down the drying process. After application, the surface should be protected from direct contact with water for at least 24h (23°C / 50% r.h).

Note

Because of the good cleaning ability of **MasterTop TC 442W**, an initial care is not necessarily required. The slight surface structure can be seen by a glossy cleaning maintenance. In order to preserve the optical properties, just satin matt to matt cleaning maintenance is suitable.

SUBSTRATE PRE-TREATMENT

The coating to which **MasterTop TC 442W** is applied should be clean and dry. Application should take place within the recoat intervals of the coating to which it will be applied. The substrate temperature should be at least 3K above the dew point.

CLEANING

Re-usable tools should be carefully cleaned immediately after use with water. Once the material has cured mechanical cleaning is required which is made easier by immersion of the tools in a suitable thinner (Xylene / MEK / Acetone).

COVERAGE

Clear version: 0.10-0.15 kg/m²

Pigmented version: 0.08-0.10 kg/m²

STORAGE AND SHELF LIFE

Store in original containers, under dry conditions and a temperature between 15–25°C. Do not expose to direct sunlight. Protect from frost. For maximum shelf life under these conditions, see "Best before...." label.

MasterTop® TC 442W

EU Regulation 2004/42

(Decopaint Guideline)

This product conforms to the EU directive 2004/42/EG (Deco-Paint directive) and contains less than the maximum allowable VOC Limit (Stage 2, 2010). According to the EU directive 2004/42, the maximum allowable VOC content for the Product Category IIA / j type wb is 140g/l (Limit: Stage 2, 2010). The VOC content for **MasterTop TC 442W** is <140g/l (for the ready to use product).

WARNING AND PRECAUTIONS

In its cured state, **MasterTop TC 442W** is physiologically non-hazardous. The following protective measures should be taken when working with the material:

Wear safety gloves, goggles and protective clothing. Avoid contact with the skin and eyes. In case of eye contact, seek medical attention. Avoid inhalation of the fumes.

When working with the product, do not eat, smoke or work near a naked flame. For additional references to safety-hazard warnings, regulations regarding transport and waste management, please refer to the relevant Material Safety Data Sheet. The regulations of the local trade association and/or other authorities, regulating safety and hygiene of workers handling polyurethane and isocyanides must be followed.

® = Registered trademark of the MBCC Group in many countries.

* Properties listed are based on laboratory controlled tests.



CE-marking according to EN 13813

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Master Builders Solutions Deutschland GmbH Donnerschweer Str. 372, D-26123 Oldenburg	
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344204	
EN 13813: 2002	
Synthetic resin screed for use internally in buildings EN 13813: SR-B1,5-AR1-IR4	
Essential characteristics	Performance
Fire behaviour*	Bfl-s1
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	<AR 1
Bond strength	>B 1,5
Impact resistance	>IR 4
Impact sound insulation	NPD
Sound absorption	NPD
Heat insulation	NPD
Chemical resistance	NPD
Slip/Skid resistance	R11, R12
Emissions behaviour	AgBB, AFSSET conform, A+ Classification

NPD = No performance determined
 Performance determined in System build-up **MasterTop 1226**

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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