

MasterSeal[®] TC 640

Aliphatic single component polyurethane topcoat for MasterSeal 2164 system

DESCRIPTION

MasterSeal TC 640 is a single component, polyurethane based, solvent containing topcoat for UV protection of polyurethane membranes

TYPICAL APPLICATIONS

UV protection of certified **MasterSeal M 640** membrane in exposed applications.

ADVANTAGES

- Single component product that allows simple application without the need of mixture.
- Excellent adhesion.
- UV resistant. Colour stability.
- Fast Curing.
- Resistant to standing water.
- Frost resistant.
- Withstands pedestrian traffic.

PACKAGING AND COLORS

MasterSeal TC 640 is supplied in 20kg and 5kg pails and available in White, Grey and Red.

APPLICATION GUIDELINES

SURFACE PREPARATION

MasterSeal M 640 to which **MasterSeal TC 640** is to be applied should be clean and dry and free of any substances which may impair adhesion. Application should take place within the re-coat intervals of the coating to which is to be applied.

MIXING

MasterSeal TC 640 is a single component material. Prior to application, the temperature of the material should be in the range of 15-25°C. Some settling of the pigments may occur on standing. **MasterSeal TC 640** should, therefore, be well stirred before use with a mechanical drill and paddle at a very low speed (approx. 300 rpm).

PLACING / APPLICATION

MasterSeal TC 640 is applied normally in two coats. Apply homogeneously covering the substrate using a brush, a short hair roller or an airless spray gun.

Temperature of the support should be minimum +5°C and maximum +35°C. The residual moisture content of the substrate must not exceed 4% (check with e.g. CM device). The temperature of the substrate must be at least 3 K above the current dew point temperature. Try to keep the temperature uniform during application and hardening. After maximum 6 hours apply the second coat. **MasterSeal TC 640** can be broadcasted with dry silica sand to provide a hard wearing, slip resistant finish.

The product must not be applied when the temperature is below +5°C or above 35°C. Do not mix solvents, sand or other products that could affect the products properties must not be added. High humidity during hardening can affect final appearance, specially gloss.

CLEANING

While still wet with solvent such as Acetone / Xylene or MEK. Once cured it can only be removed mechanically.

COVERAGE / YIELD

Approx. 150-200g/m² are required per coat. These consumptions are theoretical and can vary according to application consumptions. It is essential to carry out representative trials on site to evaluate the exact consumption.

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TYPICAL PROPERTIES*

Properties	Result
Chemical base	Polyurethane
Mixing ratio	single component
Density @20°C	1.13g/cm ³
Solids content @20°C	55%
Tack free / Rain safe @20°C	2 hours
Re-coating interval @20°C	4-6 hours
Open to pedestrian traffic @20°C	12 hours
Fully cured @20°C	7 days
Substrate and ambient temperatures	min. 8°C max. 35°C
Permissible relative humidity	max. 85%

Technical data after curing*

Properties	Standard	Result
Service temperatures	-	min. - 20°C max. 80°C
Tensile strength	DIN EN ISO	3.5N/mm ²
Elongation	DIN EN ISO	> 300%
Solar reflection SR (white colour)	ASTM E903-96	93.5%

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

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WATCHPOINTS

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 is 500g/l (Limit: Stage 2, 2010). The VOC content for **MasterSeal TC 640** is <500g/l (for the ready to use product).

STORAGE AND SHEL LIFE

Store in original containers under dry conditions at a temperature between 15-25°C. Do not expose to direct sunlight. For maximum shelf life under these conditions see "Best before....." label.

HEALTH AND SAFETY

In its cured state, **MasterSeal TC 640** is physiologically non-hazardous. The following protective measures should be taken when working with this 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 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 regarding safety and hygiene of workers handling polyurethanes and isocyanates must be observed.

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

* Properties listed are based on laboratory controlled tests.

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STATEMENT OF RESPONSIBILITY

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NOTE

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