

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.

FIELDS OF APPLICATION

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

FEATURES AND BENEFITS

- 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

APPLICATION

Application method

(a) **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.

(b) 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).

(c) 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 de- vice). 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.

COVERAGE

Approx. 150 to 200 g/ 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.

FINISHING AND CLEANING

While still wet with solvent (e.g. Cleaner 40 or solvent naphtha). Once cured it can only be removed mechanically.

PACKAGING

MasterSeal TC 640 is available in 20 kg and 5 kg pails.

COLOUR

Colours: White, Grey, Red

SHELF LIFE

MasterSeal TC 640 has a shelf life of 9 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall.

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

HANDLING/PRECAUTIONS

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.

MasterSeal TC 640


| PRODUCT DATA | | | | |
|------------------------------------|----------|----------|-------------------|-------------------|
| Properties | | Standard | Data | Unit |
| Chemical Base | | - | Polyurethane | - |
| Mixing Ratio | | A : B | single component | - |
| Density | at 20 °C | - | 1.13 | g/cm ³ |
| Solids Content | at 20 °C | - | 55 | % |
| Tack Free / Rain Safe | at 20 °C | - | 2 | h |
| Re-coating Interval | at 20 °C | - | 4 - 6 | h |
| Open to Pedestrian Rraffic | at 20 °C | - | 12 | h |
| Fully Cured | at 20 °C | - | 7 | d |
| Substrate and Ambient Temperatures | | - | min. 8 max. 35 | °C °C |
| Permissible Relative Humidity | | - | max. 85 | % |

Technical data after curing*

| Properties | Standard | Data | Unit |
|------------------------------------|----------------|----------------------|-------------------|
| Service Temperatures | - | min. - 20 max. 80 | °C °C |
| Tensile Strength | DIN EN ISO 527 | 3.5 | N/mm ² |
| Elongation | DIN EN ISO 527 | > 300 | % |
| Solar reflection SR (White Colour) | ASTME903-96 | 93.5 | % |

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

MasterSeal TC 640

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| CE-MARKING (ETAG 005) | |
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| 0761 | |
| Master Builders Solutions Coatings GmbH Donnerschweer Str. 372, D-26123 Oldenburg | |
| 10 | |
| 364001 | |
| ETAG 005 – Part 6 | |
| Liquid applied roof waterproofing kits based on polyurethane resin | |
| Water vapour diffusion resistance factor μ | 1830 |
| Resistance to wind loads | > 50 kPa |
| Resistance to spreading fire and radiant heat | NPD |
| Reaction to fire | Class E |
| Statement on dangerous Substances | Does not contain any |
| Working Life | W2 |
| Climatic Zones | M and S |
| Imposed Loads | P1 to P3 |
| Roof Slope | S1 to S4 |
| Lowest surface temperature | TL3 |
| Highest surface temperature | TH3 |
| NPD = No performance determined. Performance determined in system build up MasterSeal Roof 2164 | |

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MAP#Mastere TC 640 v2-04.2021

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NOTE

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