



The Chemical Company

MASTERTOP[®] TC441 (Conipur 41)

Pigmented polyurethane top coat

DESCRIPTION

MASTERTOP TC441 is a low solvent content, low viscosity and moisture curing, pigmented, two-component polyurethane system with a matt satin finish.

FIELDS OF APPLICATION

MASTERTOP TC441 is used as a scratch resistant and easy to clean sealer on hard smooth **MASTERTOP** floor coatings for indoor and outdoor use.

FEATURES AND BENEFITS

- exhibits good adhesion to non-porous substrates
- material is easy to apply and clean e.g. even stubborn marks can be removed with the suitable solvent
- shows excellent UV and weathering resistance
- fully cured, it exhibits high mechanical properties
- resistant to fresh water, sea and waste water
- resistant to a variety of alkalis, diluted acids, brine, mineral oils, lubricants and fuels

TYPICAL PERFORMANCE DATA

Mixing ratio (in parts by weight)		10 : 1
Solids content	%	85
Density of mix	g/cm ³	1.0 (colourless) 1.3 (pigmented)
Viscosity	mPa.s	300 (colourless)
	MPa.s	1200 (pigmented)
Pot life (23°C/50% RH)	hours	6
Re-coating interval	hours	min. 72
	at 10°C	hours max. 96
	hours	min. 24
	at 20°C	hours max. 48
	hours	min. 18
	at 30°C	hours max. 24
Ready for traffic (20°C/60% RH)	hours	16
Fully cured / ready for exposure to chemicals (20°C/60% RH)	days	5
Substrate and application temperatures	°C	min. 5
	°C	max. 30
Maximum permissible relative humidity	%	min. 40
	%	max. 85

*Above figures are guide values and should not be used as a base for specifications.

APPLICATION

MASTERTOP TC441 is applied to hard **MASTERTOP** coatings. Substrates to be coated have to be firm, dry and load bearing, free of loose and brittle particles and substances that impair adhesion such as oil, grease, rubber skid marks, paint or other contaminants. Pre-treatment of the substrate by grit or shot blasting, high-pressure water jetting, grinding or scabbling (including the necessary post-treatment) is only necessary when the coating is very dirty, it is to be applied over previous coatings, surfaces not broadcasted with sand, or when the re-coating interval has been exceeded.

After pre-treatment of the substrate, the bond strength of the substrate and the coating to be bonded must be at least 1.5 N/mm² (check with an approved pull-off tester i.e. "Herion", load rate 100 N/s).

The temperature of the substrate must be at least 3°C above the current dew point temperature.

The substrate to be coated must be protected against rising damp (back pressure).

Sealing

- Set up the **MASTERTOP** systems according to the relevant application method (refer to the product data sheets).
- **MASTERTOP TC441** is applied thinly with a foam rubber squeegee and distributed uniformly by paint roller (note maximum coverage). Coverage: ca. 0.1 max. 0.13kg/m², depending on condition of surface.
- If necessary, apply 2nd coat to improve the appearance and increase the mechanical and chemical properties (note re-coating interval).

Mixing

MASTERTOP TC441 is supplied in the correct proportions of component A (resin) and component B (hardener).

Prior to mixing the temperature of the material must be between 15-25°C. Pour component B into the container of component A and ensure that container B is emptied completely. To achieve a homogeneous mix, both components must be thoroughly mixed with a mixing device at about 300 rev/min. Ensure that the mixing device reaches side and bottom areas of the mixing vessel. Stir for at least 3 minutes or until the blend is homogeneous and streak free. Do not use the material out of the container supplied, but pour the mix into another container and remix for 1 minute.

MASTERTOP TC441 is applied with a paint-roller and distributed uniformly (respect maximum coverage). Finish by over rolling with a paint roller. Avoid puddles.

BASF Construction Chemicals offices in ASEAN

Singapore Tel :+65-6861-6766 Fax :+65-6861-3186	Malaysia Tel :+60-3-5628-3388 Fax :+60-3-7847-6781	Indonesia Tel :+62-21-893-4339 Fax :+62-21-893-4342
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Thailand Tel :+66-2204-9427 Fax :+66-2664-9267

Vietnam Tel :+84-650-743-100 Fax :+84-650-743-200
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Philippines Tel : +63-2-889-4321 Fax : +63-2-889-4361
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The workability of reactive resins is influenced by the ambient and substrate temperature.

At low temperatures the chemical reaction is slowed down; this lengthens the pot-life, re-coating interval and open time. At the same time the viscosity increases which leads to a higher consumption. Higher temperature accelerates chemical reactions so that the time frames mentioned above are shortened accordingly. To fully cure the material the substrate and working temperature must not fall below the minimum. The relative humidity limitations (minimum, maximum) must be observed.

Following application the material should be protected from direct contact with water for approximately 24 hours (at 23°C/50% RH).

Within this period, contact with water causes foaming of the sealer. Apart from these limitations, the respective guidelines for the use of reactive resins apply.

CLEANING

Re-usable tools must be cleaned carefully with Thinner No. 1.

PACKAGING

MASTERTOP TC441 is supplied in a 10kg kit.

COLOURS

- Clear-matt
- Clear-gloss
- Pebble grey RAL 7032
- Oyster white RAL 1013
- Oxide red RAL 3009
- Gentian blue RAL 5010
- Pale green RAL 6021
- Silver grey RAL 7001

SHELF LIFE

Store in original drums, under dry conditions and a temperature ranging from 15-25°C. Do not expose to direct sunlight. Under these conditions the material has a shelf life of 6 months.

PRECAUTIONS

MASTERTOP TC441 is physiologically non-hazardous in its cured condition.

The following protective measures should be taken when working with the material:

- Wear safety gloves, goggles and light protective clothing.
- Avoid inhaling the fumes and contact with the skin.
- When working with the product do not eat, smoke or work near a naked flame.

For detailed Health, Safety and Environmental recommendations, please consult and follow all the instructions on the product Material Safety Data Sheet.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **BASF Construction Chemicals** 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.

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