

MasterTop[®] TC 943

The innovative topcoat with exceptional cleanability and scratch resistance for hard wearing solutions

DESCRIPTION

MasterTop TC 943 is a pigmented, non solvated, two component topcoat producing a light stable, tough and durable surface with a lightly structured satin-mat finish that has exceptional scratch, impact and wear resistance.

AREAS OF APPLICATION

MasterTop TC 943 is designed for use as a light stable wear resistant finish for rigid and semi-rigid MasterTop body coats, such as MasterTop 1230 and MasterTop XTC. Refer to individual system data sheets MasterTop 1912 and MasterTop 1920.

FEATURES AND BENEFITS

- Based on Xolutec technology
- Structured finish improves slip resistance
- NMP, APEO, VOC, glycol- and solvent free
- Excellent scratch and impact resistance
- Good cleanability allows easy maintenance
- Improves scratch resistance
- UV-stable
- Easy to clean - Low maintenance costs
- High durability
- Durable aesthetics
- Certified for Clean Rooms

PRODUCT DATA

		Unit	Data
Mix Ratio		By Wt	3 : 7
Solid Content Pigmented		%	93.9
Density	Pigmented @ 23°C	Part A	g/cm ³ 1.36
		Part B	g/cm ³ 1.22
		Mixed	g/cm ³ 1.25
Viscosity	Pigmented @ 23°C	Part A	mPa.s 2400
		Part B	mPa.s 850
		Mixed	mPa.s 2050
Working Time		@20°C	min. 30
Ambient & Substrate Temperature		min	°C 10
		max	°C 30
Recoating Interval @23°C / 50% rh		min	Hrs 20
		max	Hrs 48
Light Pedestrian Traffic @23°C / 50% rh		Hrs	24
Fully Cured @23°C		Day	7
Maximum Relative Humidity		min	% 30
		max	% 90
Surface finish		Satin matt	
Data - Cured material			
Taber Abrasion CS 10, 1000R, 1 Kg		mg	30

SUBSTRATE PRETREATMENT

The coating to which **MasterTop TC 943** is to be applied must be clean and dry and free from oil, grease and loose material and any other contamination which might impair adhesion. The substrate temperature should be at least 3K above the dew point.

APPLICATION METHOD

MasterTop TC 943 is supplied in working packs which are pre-packaged in the exact ratio. Before mixing, precondition both A and B components to a temperature of approximately 15 to 25°C. Pre-mix Part A and Part B separately. Pour the entire contents of Part A into Part B, scratching the sides of the pail with a spatula or scraper. **DO NOT MIX BY HAND.**

Mix with a mechanical drill and paddle at a low speed (ca. 300 rpm) for 2 minutes. The diameter of the paddle (d) should be higher than half the diameter (D) of the bucket (d > D/2).

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 Parts A and B into a fresh container and mix for another minute. It is recommended to apply first corners, edges, etc. and in general those areas with a more difficult access with a small roller or brush. 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.

The application method consists in 3 steps. Immediately after the mixing is finished, pour **MasterTop TC 943** directly onto the floor and spread using a rubber squeegee. **DO NOT ALLOW MATERIAL TO STAND IN THE BUCKET.** Spread in the same direction to ease the organization during the following steps of the process.

Afterwards, spread the material with an 11 mm length hair microfiber roller (50 cm width), perpendicular to the direction of squeegee application, ensure all areas are covered and that there is a uniform appearance. After that, finish the application using again an 11 mm length hair nylon roller (50 cm width) in the opposite direction to the previous step finishing always in the same direction starting from the same edge.

For more information, please refer to the **MasterTop TC 943** application manual.

MasterTop TC 943 cures with a light and characteristic structure. The curing time of the material is influenced by the ambient, material and substrate temperatures. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times.

MasterTop[®] TC 943

High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly. To fully cure, the material, substrate and application temperature should not fall below the minimum. After application, the material should be protected from direct contact with water for approx. 24h (at 15°C).

Note: Because of the good cleaning ability of **MasterTop TC 943**, the use and application of an initial care is not required.

CONSUMPTION

0,12 kg/m²

Caution: Please do not dilute the topcoat with water. Do not exceed the maximum consumption.

CLEANING AGENT

Reusable tools should be carefully cleaned immediately after use with MasterTop CLN 40 or solvent naphtha. Once the material has cured mechanical cleaning is required which is made easier by immersing the tools in MasterTop CLN 40.

PACKAGING

MasterTop TC 943 pigmented is supplied in 10 kg working packs.

COLOURS

MasterTop TC 943 is available in a wide range of RAL colours. For more information, please consult your local sales office.

STORAGE

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.

EU REULATION 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 / i type sb is 500 g/l (Limit: Stage 2, 2010). The VOC content for MasterTop TC 943 is < 25 g/l (for the ready to use product).

WARNING AND PRECAUTIONS

In its cured state, **MasterTop TC 943** 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 isocyanates must be followed.

XOLUTEC DESIGNED FOR CONSTRUCTION



Xolutec is a smart way of combining complementary chemistries to solve the problems of challenging technical environments with a cross-linked interpenetrating network (XPN).

By controlling chemistry of the polymer chains and cross-linking density, Xolutec's properties can be adjusted to meet the required product performance, such as different degrees of toughness and flexibility.

Xolutec is very low in volatile organic compounds (VOC) and is quick and easy to apply. It cures fast at low temperature, is insensitive to moisture and tolerates a wide variety of different site conditions.

MasterTop TC 943 is based on the Xolutec Technology.

Mitglied der



MasterTop[®] TC 943

® = registered trademark of a MBCC Group member in many countries of the world

MAP#MasterTop TC 943 v1-05.2022

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	Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.
-------------	---

MB Solutions Singapore Pte Ltd
1 Harbourfront Avenue #07-07/08
Keppel Bay Tower, Singapore 098632
Tel : +65 6232 4886