

MARKOPOL 3900

An aliphatic, acrylic based polyurethane topcoat for all areas above the waterline. Top coat in epoxy/polyurethane coating systems where high demands are set with regard to colour retention and mechanical strength.

Type: polyurethane topcoat.

Usage: chemical plants, containers and constructions in various atmospherical and industrial environments.

Physical Information:

Glossy	Glossy
Colour:	Standard colours (e.g. RAL, NCS)
Volume solids:	61 ± 2 (depends on colour)
VOC (theoretical):	340 g/l
Density:	At 20 °C ± 1.45 l/kg
Theoretical coverage:	At a dry film thickness of 50 µm: 12.2 m ² /l
Heat resistance:	Maximum 120 °C (dry load)
Shelf life:	In original well shut packaging 12 months, stored inside at temperatures between 5 °C and 40 °C.
Potlife:	At 20 °C 2 hours (mixed product)
Thinner:	M.I.T T-9

Mixture: Markopol 3900 4 parts by volume, Activator 1 part by volume.

Mix base component and activator intensively, preferably using a mechanical mixing device. The temperature of the mixed product should at least be 10 °C during application.

Processing Data

	Airless spray	Brush-roller	Airspray
Thinner	M.I.T T-9	M.I.T T-9	M.I.T T-9
Amount	0-3 vol.%	0-5 vol.%	0-5 vol.%
Nozzle	min. 0.015 inch	n.a	1.2-1.5 mm
Flow pressure	120-180 bar	n.a	3-5 bar
Dry film thickness	80 µm	50 µm	80 µm

Cleaning tools: Immediately after application using thinner M.I.T T-9.

Mixing instructions: preferably using a mechanical mixing device. The temperature of the mixed product should at least be 10 °C during application.

Drying Times

	10 °C	20 °C
Dust free	4 hours	2 hours
Manageable	12 hours	6 hours
Recoatable	24 hours	12 hours

Dry times at 55% RH at a standard dry film thickness of 80 µm. (method: BYK Drying recorder)

The maximum interval is unlimited. During drying and curing the relative humidity should remain between 55% and 90%. The higher the humidity, the faster the curing.

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Recommended paint system

Markpol 3900 Finish can be applied on suitable Markaj priming systems and suitable for application up to and including C5-M and C5-H, environments according to ISO-12944.

Systems:

Corrosion Class C4	Corrosion Class C5-M	Corrosion Class C5-H
1st coat 100 µm - Markopox 1480	1st coat 80 µm - Markopox 1480	1st coat 100 µm - Markopox 1480
2nd coat 80 µm - Markopol 3900	2nd coat 80 µm - Markopox 1480	2nd coat 100 µm - Markopox 1480
	3rd coat 80 µm - Markopol 3900	3rd coat 80 µm - Markopol 3900

Surface Preparation

Steel roughness

Blasting profile 40 – 70 µm (1.6 – 2.8 mils) or power tool cleaned to minimum ISO-St3 / SSPC SP3

Untreated steel

The surface needs to be pretreated according ISO12944 part 4 § 6.2.3. Remove grease, oil, dirt etc. Grit blasting to purity degree Sa 2½ in accordance with ISO 8501-1. After blasting remove all dust from the entire surface with compressed air which is free of moisture and grease. Apply first coating layer within 6 hours. In case the final coating layer is applied on the construction site, extra precautions need to be taken.

Application conditions

The temperature of the substrate should be at least 3 °C above dew point. Keep application area well ventilated during application and drying, in order to reduce evaporated solvents. This is necessary to acquire good drying conditions and for the good of the applicators' health.

Environment and health

Harmful and irritating in contact with skin, eyes and by inhalation. In case of eye contact, immediately wash with large amounts of water and contact a medical expert. Do not eat, drink or smoke during application.

Maintenance

It is recommended to clean the surface regularly and to inspect the coats of paint for defects annually. Touch up any defects with the original paint system.

Notes: All information provided in this technical bulletin may change from time to time as a result of experience, developments in raw materials, and research and development activities. For additional information, please contact your regional sales representative or MARKAJ directly (Istanbul).