

MATACRYL MANUAL LM

Liquid applied low modulus waterproofing membrane

August 2024

PRODUCT:

Matacryl Manual LM is a medium viscosity, urethane-modified, prereacted 100% solid membrane system based on acrylic monomers. To initiate curing, just add Matacryl Catalyst.

USAGE:

Matacryl Manual LM is designed as a liquid applied, low modulus waterproofing membrane and coating. Can also be used as a joint filler with low dynamic movements.

The cured product is a very flexible crack-bridging membrane that retains its flexibility and crack-bridging performance in service even when the temperature reaches -30°C.

The areas of application for Matacryl Manual LM include:

- As a Bridge Deck waterproofing membrane, on to which asphalt at temperatures up to 250°C can be directly applied.
- For sub-grade waterproofing of Buildings and Civil Engineering Structures, including underneath Ground Slabs.
- Waterproofing of concrete and metal Railway bridges including directly under track ballast.
- Waterproofing of Pedestrian and Vehicular trafficable areas (Balconies, Car Parks etc.)
- The protection and waterproofing of Stadium Terracing.
- Protection and waterproofing of Tunnels, Channels and Dam structures.
- Waterproofing of containment structures including Reservoirs and waste and contaminated material storage structures.
- As a joint filler for joints with low dynamic movements.

Matacryl Manual LM can be applied at a wide range of ambient and substrate temperatures (-10°C to +35°C) onto cementitious based screeds, concrete, filled bitumen/asphalt, metal, ceramic tile and wood substrates.

STANDARD PACKS:

25 kg units.

PROPERTIES:

Liquid State		
Viscosity, 25°C	270-430 mPa*s	DIN 53018
Density, 25°C	1.23 g/ml	ISO 2811
Pot life/processing time at 20°C	15 min.	
Curing time at 20°C	approx. 60 min.	
Flash Point	+11.5°C	ISO 1516

Cured State tested at 20°C		
Tensile strength	5.0 N/mm ²	ISO 527
Elongation	330%	ISO 527
Modulus of elasticity	8.3 MPa	ISO 527
Abrasion 1000 cycles	64 mg	ISO 7784-2
Dynamic crack-bridging	>5 mm	BPG
Shore A hardness	>85 IRHD	NFP 98285
Shore D hardness	55	DIN 53505

KEY BENEFITS:

- Highly flexible
- Excellent crack bridging characteristics
- Easy to apply
- Excellent waterproofing properties
- Very high impact and puncture resistance
- Good chemical and abrasion resistance
- Fully cured one hour after application

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PROPERTIES continued:

Cured State samples conditioned at -20°C for 24hrs before testing		
Tensile strength	4.3 N/mm ²	ISO 527
Elongation	315 %	ISO 527
Modulus of elasticity	225 MPa	ISO 527
Dynamic crack-bridging	>5 mm	VTT

Please note that an objective comparison with other data is only possible if norms and parameters are identical.

SUBSTRATE PREPARATION:

The area to be waterproofed must be dry, firm, solid and free of dust, fat and oil. Laitance and loose particles must be removed thoroughly, e.g. by shot blasting. Fats or oils as well as dampness can be removed by flame blasting for example. Before application of Maticryl Manual LM, a suitable Maticryl Primer must be first applied, including sand-blasting when appropriate. For further details, see our general preparation and application guidelines for Maticryl waterproofing systems.

MIXING:

Prior to use, Maticryl Manual LM must be carefully stirred to achieve a uniform distribution of paraffin contained in the product. Maticryl Manual LM is then thoroughly mixed together with the Maticryl Catalyst (50% dibenzoyl peroxide), in accordance with the following guidelines.

It should be noted that the amount of catalyst powder to be added depends upon the substrate temperature.

At 30°C:	Add 250 grams of catalyst to a pail of 25 kg
At 20°C:	Add 350 grams of catalyst to a pail of 25 kg
At 10°C:	Add 600 grams of catalyst to a pail of 25 kg
At 0°C:	Add 1000 grams of catalyst to a pail of 25 kg
Below -5°C:	Add 1000 grams of catalyst to a pail of 25 kg and additionally add Maticryl Accelerator. Please contact your Equus Representative for further details.

Note: Weight to Volumetric conversion of Catalyst. 1 cm³ of Maticryl Catalyst weighs 0.64gm. 1gm of Maticryl Catalyst = 1.57 cm³

APPLICATION:

Maticryl Manual LM is designed to be manually applied using a trowel or squeegee.

THIXOTROPY:

If a slightly higher thixotropy of Maticryl Manual LM is required up to 1% (by weight) of silica based thixotropic agent can be mixed in on site.

CONSUMPTION:

For product consumption per m²; please consult the System Build-up Sheets.

Per layer of membrane; a minimum thickness of 1mm (=1.23 kg/m²) should always be applied per coat.

SHELF LIFE:

Six months when stored in a cool and dry place and in originally closed packaging. The optimal storage temperature is 15-20°C.

BUILDING CODE COMPLIANCE:

For Building Code Compliance information see the (EMC) Equus Maticryl Carpark System TDS or (EMP) Equus Maticryl Pedestrian System TDS.

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HEALTH AND SAFETY:

Protective clothing, gloves and safety goggles must be worn when filling, mixing or handling of Matacryl Manual LM. When the product is applied in enclosed areas without natural ventilation, forced ventilation must be arranged. Avoid strong concentration of vapour as well as direct contact with skin or eyes. For further information see our Safety Data Sheet.

WARNINGS AND BANS:

Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?	No
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MANUFACTURERS CONTACT DETAILS:

Manufacture location	Australia
Legal and trading name of manufacturer	Tremco CPG Pty Ltd.
Manufacturer address for service	12/4 Southridge Street, Eastern Creek, NSW 2766, Australia
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