

# Matacryl<sup>®</sup> Manual

**A highly elastic heavy duty manually applied 100% seamless waterproofing**

## Key Benefits Summary:

- Highly flexible with excellent crack-bridging characteristics even at extremely low temperatures (-20°C and below)
- Easy to apply using a roller or a squeegee
- Thixotropic version available for vertical surfaces
- Excellent waterproofing properties
- Very high impact and puncture resistance
- Withstands stress and movements in the substrate
- Excellent adhesion to many types of substrate
- Good chemical and abrasion resistance
- Can be applied over a wide range of ambient and substrate temperatures (-10°C to +35°C)
- Can easily be repaired; excellent inter-layer adhesion due to chemical bonding
- Overcoating time not critical
- Fully cured one hour after application

## Product Information

### Description:

**Matacryl<sup>®</sup> Manual** is a medium viscosity, urethane-modified, prereacted 100% solid membrane system based on acrylic monomers. To initiate curing, just add **Matacryl<sup>®</sup> Catalyst**.

### Usage:

**Matacryl<sup>®</sup> Manual** is designed as a simple to apply, highly elastomeric liquid waterproofing membrane and coating.

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 -20°C.

The domains of application for **Matacryl<sup>®</sup> Manual** include:

- As a Bridge Deck waterproofing membrane, onto which asphalt at temperatures up to 250°C can be directly applied.
- For the sub-grade waterproofing of Buildings and Civil Engineering Structures, including underneath Ground Slabs.
- The waterproofing of concrete and metal Railway bridges including directly under track ballast.
- The waterproofing of Pedestrian and Vehicular trafficked areas (Balconies, Car Parks etc.)
- The protection and waterproofing of Tunnels, Channels and Dam structures.

- The waterproofing of containment structures including Reservoirs and waste and contaminated material storage structures.

- Offshore platforms.

**Matacryl<sup>®</sup> Manual** can be applied at a whole 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.

### Packaging:

30 kg units

### Technical Information:

#### Technical characteristics (liquid state)

Viscosity, 25°C:	100-130mPa*s	DIN 53214
Density, 25°C:	1,23 g/ml	DIN 51757
Pot life/processing time at 20°C:	approx. 15min.	
Curing time at 20°C:	approx. 60 min.	
Flash point:	+11.5°C	ISO 1516

#### Technical characteristics (cured state)

##### Samples tested at 20°C

Shore A hardness:	>85 IRHD	NFP 98285
Shore D hardness:	55	DIN 53505
Tensile strength:	11,0 MPa	DIN 53455
Elongation:	>300%	DIN 53455
Modulus of elasticity:	5,60 MPa	DIN 53457
Abrasion 1000 cycles:	64mg	ISO 7784-2
Dynamic crack-bridging:	>5mm	BPG

##### Samples tested at -20°C

Tensile strength:	24 MPa	ISO 527
100mm/min		
Elongation:	107%	ISO 527 100mm/min
Dynamic crack-bridging:	>5mm	BPG

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

### Usage Guidelines:

#### Substrate Preparation:

The are 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 humidity can be removed by flame blasting for example.

Before application of the **Matacryl<sup>®</sup> Manual**, a suitable **Matacryl<sup>®</sup> Primer**, including sanding when appropriate, must be first applied.

For further details, see our general preparation and application guidelines for Matacryl waterproofing systems.



### Mixing:

Prior to use, **Matacryl® Manual** must be carefully stirred to achieve a uniform distribution of paraffin contained in the product. **Matacryl® Manual** is then thoroughly mixed together with the **Matacryl® 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 200 grams of catalyst to a pail of 30 kg  
at 20°C add 350 grams of catalyst to a pail of 30 kg  
at 10°C add 700 grams of catalyst to a pail of 30 kg  
at 0°C add 1200 grams of catalyst to a pail of 30 kg  
Below -5°C add 1200 grams of catalyst to a pail of 30 kg and additionally add **Matacryl® Accelerator**. Please contact your local Equus Representative for further details.

Note: weight to Volumetric conversion of catalyst.

1 cm<sup>3</sup> of **Matacryl® Catalyst** weighs 0.64 g

1 g of **Matacryl® Catalyst** = 1.57 cm<sup>3</sup>

### Application:

**Matacryl® Manual** is designed to be manually applied using a roller or squeegee.

### Consumption:

For the consumption of the product per m<sup>2</sup>; please consult the System Build-up Sheets.

Per layer of membrane; a minimum thickness of 1mm (=1.23kg/m<sup>2</sup>) should always be applied.

### Shelf Life:

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

### Health & Safety Precautions:

Protective clothing, gloves and safety goggles must be worn when filling, mixing or handling of **Matacryl® Manual**. 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 Material Safety Data Sheet.

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