



Matacryl® THIX

THIXOTROPIC SEAMLESS WATERPROOFING MEMBRANE

Product Description

Matacryl® THIX is a viscous, urethane-modified, pre-reacted 100% solids membrane system based on acrylic monomers. It is part of an innovative waterproofing system that supports tight completion timelines of projects and ensures long-term performance and resilience.


Matacryl THIX is an easy to apply, highly elastomeric liquid waterproofing membrane and coating. It can be applied at a range of ambient and substrate temperatures from -20°C to 35°C onto cementitious based screeds, concrete, filled bitumen/ asphalt, metal, ceramic tile and wood substrates.

Features and Benefits

- Fully cured one hour after application
- Rapid cure allows quick installation, regardless of temperature, enabling wintertime installations
- Highly-flexible crack-bridging membrane with excellent performance characteristics, even in extremely low temperatures: -20°C
- Excellent adhesion to a variety of substrates
- Unique chemistry facilitates easy repair solutions
- Easy to apply using a brush or trowel
- No time limit or additional preparation required for subsequent membrane applications
- Excellent chemical, abrasion, impact and puncture resistance
- Withstands movement and stress in the substrate
- Designed for vertical surfaces

Waterproofing Applications

- Bridge decks (concrete and steel)
- Sub grade of civil engineering structures including underground slabs
- Concrete and metal railway bridges, including directly under track ballast
- Pedestrian and vehicular bridges and walkways
- Tunnels, channels and dam structures
- Containment structures including waste and contaminated material storage

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Universal Sealants (UK) Ltd, Kingston House, 3 Walton Road, Pattinson North, District 15, Washington, Tyne & Wear. NE38 8QA 13 1119-CPR-1190	
EN 1504-2 Surface protection system Coating	
Abrasion Resistance (Taber Test)	<3000 mg
Permeability to CO ₂	S _D > 50 m
Capillary Absorption and Permeability to Water	<0.1 kg/m ² .h ^{0.5}
Resistance to Severe Chemical Attack	Class II
Impact Resistance	Class I
Adhesion Strength by Pull-Off Test	≥2 MPa
Adhesion Test after Thermal Compatibility Testing	≥2 MPa
Adhesion on Wet Concrete	≥1.5 MPa
Reaction to fire	Cfl— s1



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Technical Data*

PROPERTY	TEST METHOD	VALUE
Viscosity @ 25°C	DIN 53019	6000-10000 mPa.s
Density @ 25°C	ISO 2811	1.36 g/ml
Curing Time @ 20°C		approx. 60 minutes
Elongation @ 24°C	DIN EN ISO 527	> 280%
Tensile Strength @ 24°C	DIN EN ISO 527	> 10 MPa
Shore A Hardness	DIN EN ISO 868	87
Shore D Hardness	DIN EN ISO 868	35
Static Crack Bridging @ -26°C	NF EN 1062-7	≥ 2.7 mm

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

INSTALLATION INSTRUCTIONS

Surface Preparation

- To prime, substrates must be dry, firm, solid and free of dust, grease, oil, and loose particles, usually by shot or sand blasting to attain correct surface profile. Newly poured concrete must have reached adequate strength to receive Matacryn system.
- Prior to applying Matacryn THIX, a suitable Matacryn Primer, including sand-scatter when appropriate, must be applied.
- Substrate moisture content should be <6%.

Mixing

- Prior to use, Matacryn THIX must be carefully stirred to achieve uniform distribution of the paraffin in the product, normally a minimum of three (3) minutes.
- Using a variable speed drill with helical stirrer, Matacryn THIX is thoroughly mixed together with Matacryn Reactive Filler (25% dibenzoyl peroxide) or Matacryn Catalyst (50% dibenzoyl peroxide), in accordance with the following guidelines (below). The amount of Matacryn Reactive Filler/Matacryn Catalyst to be added depends on the substrate temperature.

TEMP °C	MATACRYL REACTIVE FILLER	MATACRYL CATALYST	MATACRYL ACCELERATOR
<0	12% by weight of resin	6% by weight of resin	1-3% by weight of resin
0	10% by weight of resin	5% by weight of resin	n/a
10	8% by weight of resin	4% by weight of resin	n/a
20	4% by weight of resin	2% by weight of resin	n/a
30	2.2% by weight of resin	1% by weight of resin	n/a

Note: For safety reasons, Matacryn Accelerator must be added to reactive resin PRIOR to adding any Matacryn Reactive Filler/Matacryn Catalyst. See TDS Matacryn Accelerator for more details.



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Application

Matacryn THIX is manually applied using a brush or trowel. For the consumption of product per m², please consult the System Build Up Sheets. A minimum thickness of 1mm (1.36kg/m²) per layer of membrane should always be applied. If extending an existing Matacryn application, the new membrane should overlap by a minimum of 50mm.

Do not apply when surface temperature is above 40°C and/or rapidly rising. Special care must be observed if area is exposed to direct sunlight.

Substrate temperature must be at least 3°C above actual dew point and rising.

The techniques involved may require modification to adjust to job-site specific conditions. Consult your USL Speciality Products Sales Representative or USL Technical Services for site conditions and requirements. For further installation details, see our General Preparation and Application Guidelines for "Matacryn Systems".

Cleaning

Clean all mixing equipment and tools regularly and immediately after use with Acetone.

Packaging

Matacryn THIX is available in 25kg pails

BPO hardener catalyst is available as 25kg box

Both above parts are required

Acetone is available in 20 litre drums

Storage

Shelf life is 12 months for resin and 6 months for BPO when stored in original unopened packs in a cool and dry place.

The date of manufacture is given on the label.

Storage temperature between 5°C and 40°C out of direct sunlight. Optimal storage temp: 15°C to 20°C.

Flash point + 12°C.

Protect from frost, adverse weather and moisture / contaminant ingress.

Health and Safety

Suitable protective clothing, gloves and safety goggles must be worn during mixing and application.

In case of contact with eyes rinse immediately for a long period of time and consult a physician. In case of contact with skin clean immediately with water and soap.

Highly flammable; keep away from heat and all sources of ignition and do not smoke. All electric appliances used on the application site must be explosion-proof versions.

For further information see our Material Safety Data Sheet. Safety Data Sheets (SDS) are available from USL and are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the latest information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product



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Warranties and Disclaimers

Hychem warrants that this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper use and application of the product by the applicator. Hychem has no role in the application of the finished polymer other than to manufacture and supply its components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of spray equipment and application of sol-gel materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Hychem and executed under seal by a company officer.

Field Support

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

Customer Responsibility

The technical information and application advice given in this publication is based on the best information available at the time of print. As the information herein is of a general nature, no assumption can be made as to the product 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 Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.