



Waterproofing ISOCRYL FLEX MASTER PU HYBRID

Technical Data Sheet

Reviewed: 02.06.2022



DESCRIPTION

ISOCRYL FLEX MASTER PU HYBRID is one component, liquid-applied, hybrid waterproofing membrane based on polyurethane and synthetic acrylic resins. It is suitable for waterproofing old and new building surfaces. It forms an elastic seamless vapor permeable membrane without joints with excellent resistance to humidity, weather conditions as well as high temperatures and UV rays.

ADVANTAGES

- Hybrid technology
- Elastic, seamless, vapor permeable and reflective membrane without joints
- Excellent elasticity
- Superior adhesion on most building surfaces
- Excellent water - humidity resistance
- Excellent resistance to ageing and UV rays
- User and environmentally friendly - does not contain organic solvents
- Simple application
- Waterbased - nonflammable - easy to clean

APPLICATIONS

- Waterproofing of rooftops and terraces.
- Waterproofing of gutters, domes, cornices, ondulated panels etc.
- Waterproofing bitumen and polyurethane hard foam surfaces.
- Suitable for concrete surfaces, bitumen material, wood, stone, brickwork, PVC, polyurethane foam, plaster, metal etc.

INSTRUCTIONS FOR USE

Substrate preparation

Careful surface preparation is essential for optimum finish and durability.

The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect adhesion. Remove any loose parts. Fresh concrete needs at least 28 days to set. Humidity should not exceed 6%. Previous coatings, grease, plant

organisms and dust should be removed with the use of a floor sanding machine and washed with high-pressure water. Surface irregularities must be smoothed out. Loose parts or sanding dust must be removed.

Repair of cracks and joints

The careful sealing of existing cracks and joints before the application is extremely important for long lasting waterproofing results.

1. Clean concrete cracks and hairline cracks, from dust, residues or other contamination.
2. Cracks and joints 3-8mm must be primed locally with solvent based primer ISOCRYL PRIMER DUR, or waterbased primer ISOCRYL PRIMER DUR AQUA and allow drying. Fill all prepared cracks with elastomeric acrylic filler FLEX or **ISOCRYL FLEX MASTER PU HYBRID**.
3. Larger cracks and expansion joints 8-20mm must be primed with polyurethane primer PRIMER PU 900 and sealed with polyurethane sealant BONDFLEX.
4. For smaller cracks 2-3mm it is recommended to prime with solvent based primer ISOCRYL PRIMER DUR, or waterbased primer ISOCRYL PRIMER DUR AQUA. Apply one coat of **ISOCRYL FLEX MASTER PU HYBRID**, and while the surface is still wet apply fibre net (30gr/m²) or fibre tape (60gr/m²) at least 10cm wide. Then apply another coat of **ISOCRYL FLEX MASTER PU HYBRID**.

Priming

1. Prime absorbent surfaces like concrete and cement screed with solvent based primer ISOCRYL PRIMER DUR, or waterbased primer ISOCRYL PRIMER DUR AQUA. Allow drying for 2 - 4 hours.
2. Prime non-porous or difficult surfaces (aluminium, plastics) with ADHESIL PRIMER.

Application

1. Apply ISOCRYL FLEX MASTER PU HYBRID on the primed surface diluted 5% - 15% with clean water, using a brush, roller or spray gun. Allow drying for 12 - 14 hours.
2. Apply a second layer crossways to the first layer, diluted to 5%.
3. For extra protection or where required a third layer may be applied.
4. Surfaces can be walked on at least after 24 - 48 hours. New treated surfaces exhibit a tackiness at the beginning, which disappears in due time.

For best results, the temperature during application and cure should be between 8°C and 35°C. Application must be avoided when rain or frost is expected. Make sure that the surface temperature is between 5°C and 35°C as direct sun exposure can increase this to more than 50°C.

CLEANING

Clean all tools and equipment with water and soap right after application. Cured material can be removed only by mechanical means or varnish and paint remover MERCOLA STRIPP & CLEAN.

COVERAGE

1 - 2 m²/Lt depending on surface absorption and texture

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TECHNICAL CHARACTERISTICS

Base: Acrylic emulsion modified with aliphatic polyurethane resins

Form: Thixotropic liquid

Colour: White

Smell: Characteristic of acrylic emulsion

Density: 1,3 ± 0,02 gr/ml ASTM D-1475

PH: 8-9

Solid content: 50%

Water Vapor Permeability: >19 gr/m²/day ISO 9932:91

Resistance to stagnant water after 7 days: No difference
ASTM D-870

Bending Test (F 2 mm): No cracks ASTM D-522

Elongation at Break: >400% ASTM D-412

Tensile Strength: 1,3N/ mm² ASTM D 412

Resistance to Water Pressure: No Leak (1m water column,
24h) DIN EN 1928

Adhesion to concrete: >1,5 N/mm² (concrete surface failure)
ASTM D 903

Hardness (Shore A Scale): 42 ASTM D 2240 (15")

Uniformity after 72h at 23 °C: No water separation or settlement
after moderate stirring ASTM D-2824

Consistency: Good application by spray, roller or brush

Application temperature: 5°C έως 35°C

Light Pedestrian Traffic Time: 18 hours, 20°C, 50% RH

Final Curing time: 7 days, 20°C, 50% RH

VOC (Volatile Organic Compounds) CONTENT: (Directive 2004/42/CE) EU maximum VOC content limit values for this product (category A/c(WB): "Exterior walls of mineral substrate"): 40 gr/l (2010). This product contains maximum 28 gr/l VOCs (ready for use product).

STORAGE

Store in dry and cool storage conditions at temperatures 5^o-35^oC. Protect from moisture, frost and direct sunlight.

SHELF LIFE

At least 12 months in unopened containers. Products should remain in their original unopened containers, bearing the manufacturers batch number.

PACKAGING

White: 9Lt

PACKAGING	CODE	BARCODE
White 9Lt	5261	5204094052616

HEALTH AND SAFETY INFORMATION

P101: If medical advice is needed, have product container or label at hand. **P102:** Keep out of reach of children. **P103:** Read label before use. **P501:** Dispose of contents and / or their container according to the separated collection system used in your municipality. **EUH208:** Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

The directives contained in this technical data sheet are the result of our long experience from real life applications and the research testing of our research and development laboratory and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications, which are beyond our control, we cannot accept any responsibility for the results obtained. In every case it is recommended to carry out preliminary experiments. We are liable only for our products for being free from faults and of consistent quality. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. The present edition of this technical datasheet automatically cancels any previous ones concerning the same product.



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