

MasterSeal P 770

2-Component Xolutec Primer for MasterSeal Waterproofing Systems

DESCRIPTION

MasterSeal P 770 is a two-component primer based on Xolutec - Technology, providing high substrate penetration and acting as bond promoter for the subsequent MasterSeal systems, e.g. MasterSeal 7000 CR.

Xolutec™ - a new dimension in durability

Xolutec is an innovative and smart way of combining complementary chemistries. When the material is mixed on site a cross linked interpenetrating network (XPN) is formed enhancing the overall material properties. By controlling the cross-linking density, the properties of Xolutec can be adjusted depending on the product performance required, e.g. this allows the formulation of materials with varying degrees of toughness and flexibility. Xolutec is very low in volatile organic components (VOC), is quick and easy to apply with both spray and hand application depending on requirements. It cures rapidly even at low temperature, reducing application time thus enabling fast return to service and minimizing downtime.

This technology is not sensitive to moisture and tolerates a wide variety of different site conditions, greatly expanding the application window and reducing the potential for delays and failures. Long maintenance cycles and lower life cycle costs significantly reduce total cost of ownership.

FIELD OF APPLICATION

MasterSeal P 770 is used as primer on mineral substrates for MasterSeal systems. It will improve the adhesion and prevent the appearance of pinholes or bubbles in the subsequent hardened coating.

FEATURES AND BENEFITS

- **Low viscosity**
- **Easy to apply**
- **Excellent penetration**
- **Seals pores and capillaries**
- **Moisture tolerant:** can be applied on substrates with high residual humidity.
- **Excellent bond to substrate**
- **Does not contain solvents.**

APPROVALS AND CERTIFICATES

CE Certification as Primer for MasterSeal M 790 in the system MasterSeal 7000 CR according to EN 1504-2.

APPLICATION METHOD

(a) Surface Preparation

All substrates (new and old) must be structurally sound, dry, free of laitance and loose particles and clean of oil, grease, rubber skid marks, paint stains and other adhesion impairing contaminants.

Concrete: The surface should be prepared by shot blasting, high-pressure water jetting or other suitable mechanical method. After preparation, concrete and other cementitious substrates must have a minimum pull off strength of 1.5 N/mm² (lowest single value 1.0 N/mm²).

Very rough / irregular substrates on walls should be levelled before application with a suitable fairing coat, e.g. MasterEmaco N 5100 FC. On floors a suitable repair or levelling solution should be used. It is essential to have all pores closed in mineral substrates before priming.

Wall/Floor connections must be rounded by using suitable products e.g. MasterSeal 590, MasterSeal P 385 Part D or MasterEmaco S 5440 RS.

The substrate should be visibly dry - there is no limit to residual humidity. Substrate temperature must be minimum +5 °C and maximum +35 °C. The temperature of the contact surfaces must be at least 3 °C above the ambient dew point temperature.

(b) Mixing

MasterSeal P 770 is supplied in working kits which are pre-packaged in the exact mixing ratio.

Pour the entire content of Part A into the container of Part B and mix with a mechanical drill and paddle at low speed (max. 400 rpm) for 90 seconds. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles.

Do not mix part packs and do not mix by hand!

Attention: unused remains of mixed material can lead to a strong heat development in the pail. Always use up all mixed material completely.

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(c) Application

After mixing, MasterSeal P 770 is applied to the prepared substrate by brush or roller. The curing time of the material is influenced by the ambient, material and substrate temperatures.

At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times. High temperatures speed up the chemical reactions thus the pot life, open time and curing times are shortened accordingly. To fully cure, the material, substrate and application temperature should not fall below the minimum. The temperature of the contact surfaces must be at least 3 °C above the ambient dew point temperature. MasterSeal P 770 dries as an intense transparent film (within 5 hours @ 20° C). In case there are holes not covered by the primer, please apply a second coat of primer. Wait for at least 5 hours (@ 20° C) before applying MasterSeal systems.

We recommend overcoating the primer within the next 48 hours of its application. If this time is exceeded, please contact your Master Builders Solutions Technical representative.

FINISHING AND CLEANING

Tools can be cleaned with solvent-based cleaner while still wet. Once cured, the material can only be removed mechanically.

COVERAGE

The consumption of MasterSeal P 770 is approximately 0.25 – 0.4 kg/m².

This consumption is theoretical and can vary according to the absorption and roughness of the substrate. It is essential to carry out representative trials on site to evaluate the exact consumption.

WORKING TIME

Approximately 20 minutes at 20 °C ambient and substrate temperature.

PACKAGING

MasterSeal P 770 is available in 5 kg Kits consisting of 2.2 kg Part A and 2.8 kg Part B as well as 9 kg Kits consisting of 4 kg Part A and 5 kg Part B.

COLOUR

Milky-ivory.

STORAGE

MasterSeal P 770 should be stored in original containers under dry conditions at temperatures between 10 - 25° C preferably. Protect from frost and no permanent storage over +30 ° C.

SHELF LIFE

Shelf life under these conditions is 12 months for both parts.

WATCH POINTS

- Do not apply at temperatures below +5 °C nor above + 35 °C
- Eventual separation of Part A can occur – this is no product failure and the material can be easily re-homogenized by mixing.
- Do not add any solvents or other components to MasterSeal P 770 mixes.
- **Attention:** unused remains of mixed material can lead to a strong heat development in the pail. Use up all material completely!

HANDLING AND TRANSPORT

Usual preventive measures for the handling of chemical products should be observed when using this product, for example do not eat, smoke or drink while working and wash hands when taking a break or when the job is completed.

Specific safety information referring the handling and transport of this product can be found in the Material Safety Data Sheet.

Disposal of product and its container should be carried out according to the local legislation in force. Responsibility for this lies with the final owner of the product.

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Technical data				
Property		Standard	Unit	Data
Density of mixed material	Part A Part B mixed	EN ISO 2811-1	g/cm ³	approx. 1.25 approx. 1.17 approx. 1.2
Viscosity of mixed material	Part A Part B mixed	EN ISO 3219	mPas	approx. 1140 approx. 125 approx. 650
Application temperature (substrate and material)		-	°C	from +5 to +35
Maximum substrate moisture (during application)		not restricted, but surface must be visibly dry		
Maximum relative humidity (during application)		not restricted, but no condensation of water on the surface		
Pot-life	at +5 °C at +10 °C at +20 °C at +30 °C		minutes	approx. 30 approx. 25 approx. 20 approx. 10
Dry to touch	at +20°C		hours	approx. 5
Ready for pedestrian traffic / Re-coating interval	at +10 °C at +20 °C at +30 °C		hours	min. 11 min. 5 min. 2
Fully cured	at +10 °C at +20 °C at +30 °C		days	7 5 2
Glass transition temperature after 28 days		EN 12614	°C	109
Adhesion to concrete after 7d	at +5 °C at +20 °C at +30 °C	EN 1542	N/mm ²	>4.0 >4.0 >4.0
Adhesion to tiles after 7 days	- fully vitrified tiles - vitrified tiles - non-vitrified tiles (glazed tiles)	based on EN 1542	N/mm ²	> 2.0 > 5.0 > 2.5
Adhesion in combination with subsequent layers of	- MasterSeal M 790 (Xolutec) - MasterSeal M 310 (epoxy) - MasterSeal M 336 (epoxy-polyurethane) - MasterSeal M 391 (epoxy) - MasterSeal M 689 (polyurea, hot-spray) - MasterSeal M 808 (polyurethane) - MasterSeal M 811 (polyurea-hybrid, hot-spray)	EN 1542	N/mm ²	> 2.5 > 3.0 > 2.5 > 3.0 > 2.5 > 2.5 > 3.0
Water vapour permeability S _D		EN ISO 7783	m	Class III (impermeable) 76 (coverage 200 g/m ²) 108 (coverage 400g/m ²)

Note: Hardening times are measured at 20°C ± 2°C and 60% ± 10% relative humidity. Higher temperatures and/or higher relative humidity can shorten these times, and vice versa. Technical data shown are statistical results and do not correspond to guaranteed minima. Tolerances are those described in appropriate performance.

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CE-marking (EN 1504-2)

	
1119	
Master Builders Solutions Deutschland GmbH Donnerschweer Str. 372, D-26123 Oldenburg	
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700001	
EN 1504-2:2004	
Surface protection product / coating EN 1504-2: Principles 1.3 / 2.2 / 5.1 / 6.1 / 8.2	
Abrasion resistance	≤ 3000 mg
Permeability to CO ₂	Sd > 50
Permeability to water vapour	Class III
Capillary absorption and permeability to water	< 0.1 kg/(m ² xh ^{0.5})
Thermal compatibility after freeze-thaw cycling	≥ 1.5 N/mm ² Pass
Resistance to severe chemical attack Class I: 4a,6a,9a,13,15 Class III: 1,2,3,4,5,5a,6,7,9,10,11,12,14,15a	Reduction of hardness < 50 %
Crack bridging ability	A3 (23°C) A2 (-10°C) B3.1 (23°C) B2 (-10°C)
Impact resistance	Class III
Adhesion strength by pull-off test	≥ 1.5 N/mm ²
Reaction to fire	Class E
Dangerous substances	Comply with 5.3 (EN 1504-2)

NPD = No performance determined. Performance determined in system build up **MasterSeal 7000 CR**.

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DISCLAIMER

In view of widely varying site conditions and fields of application of our products, this technical data sheet is meant to provide general application guidelines only. This information is based on our present knowledge and experience. The customer is not released from the obligation to conduct careful testing of suitability and possible application for the intended use. The customer is obliged to contact the technical helpline for fields of application not expressly stated in the technical data sheet under "Fields of Application". Use of the product beyond the fields of application as stated in the technical data sheet without previous consultation with Master Builders Solutions and possible resulting damages are in the sole responsibility of the customer. All descriptions, drawings, photographs, data, ratios, weights i.e. stated herein can be changed without advance notice and do not represent the condition of the product as stipulated by contract. It is the sole responsibility of the recipient of our products to observe possible proprietary rights as well as existing laws and provisions. The reference of trade names of other companies is no recommendation and does not exclude the use of products of similar type. Our information only describes the quality of our products and services and is no warranty. Liability is accepted for incomplete or incorrect particulars in our data sheets only in the event of intent or gross negligence, without prejudice to claims under product liability laws.

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Technical Data Sheet MasterSeal P 770 – February 21
Version 01