



### Product description

maxit eco 71 is a sprayable interior insulation based on cement and hollow glass microspheres. This plaster is classified in mortar group P III according to DIN 18550 and strength class CS I according to DIN EN 998-1.

### Product properties

maxit eco 71 is an easy-to-apply system plaster for interior insulation with a thermal coefficient of 0.042 W/m<sup>2</sup>\*K. When applied in thicknesses between 20 and 100 mm, no reinforcement is required; for greater thicknesses up to max. 150mm, reinforcement must be used, e.g. mesh. One tonne of dry mortar yields 7200 litres of fresh mortar.

### Uses

Lightweight, extremely flexible thermal insulation plaster for use on all standard, load-bearing substrates. Substrates should be dry and must not show any signs of moisture penetration. Any rising damp or moisture penetrating from the outside must be eradicated. Hygrothermal non-steady-state calculation methods such as Wufi 6.2 or similar methods are recommended for dimensioning the interior insulation. The system can also be used to correct significant surface irregularities. maxit eco 71 is especially suitable for renovation work and can be used on all substrates suitable for plastering.

### Product benefits

- Purely mineral
- Easy to recycle
- Can be disposed of as construction waste
- High energy efficiency
- Excellent insulating properties
- High heat storage capacity
- Supplied in bags and silos
- High yield
- Absolutely no segregation inside bags and when applying from silos
- Non-combustible (class A construction material)
- Completely joint free and void-free insulation
- No levelling plaster required

### Site requirements

Substrates must comply with the relevant standards and application guidelines of the manufacturers. Do not apply if ambient and/or surface temperature is below +5 °C or above +30 °C, or when night frost is expected.

### Substrate preparation

Substrates should be stable, sufficiently load-bearing and free from dust as well as formwork oil, wax and other release agents. Observe the provisions stipulated in DIN 18336 VOB, Part C (German Construction Contract Procedures) regarding the evaluation and preparation of substrates. All mineral substrates must be thoroughly set and dry. Moisture penetration, e.g. due to rising damp or similar, must be prevented, as with all other insulation measures. Before applying to existing masonry, apply a spatterdash

#### maxit süd

Franken Maxit Mauermörtel GmbH & Co.  
Azendorf 63  
95359 Kasendorf  
Germany  
Tel.: +49 (0)9220/18-0  
www.maxit.de

#### maxit nord

maxit Baustoffwerke GmbH  
Brandensteiner Weg 1  
07387 Krölpa  
Germany  
Tel.: +49 (0)3647/433-0  
Fax: +49 (0)3647/433-380  
www.maxit.de

coat of maxit eco 70 to create a key (50-70% coverage) and roughen the surface horizontally with a stiff brush.

No bonding mortar is required when applying to new, absorbent substrates/masonry.

#### Important notice:

We offer training courses with corresponding certification in application of the product.

### Application

The product is normally applied with a silo mixing pump or with a PFT G4 rendering/plastering machine fitted with insulation plastering equipment. For smaller areas such as flaws and reveals, the product can be applied manually. Apply an initial 10 mm layer of maxit eco 71. Then apply a further layer wet-in-wet in a thickness of approx. 30 mm up to max. 100 mm (single layer application). For thicknesses exceeding 100 mm up to 150 mm, use suitable corrosion-resistant render reinforcement (e.g. Welnet). If the residual moisture is  $\leq 75$  digits (measured with a Gann hydrometer, for example), always reinforce with maxit eco 73 or purcalc 315 and 8 x 8 mm mesh. Setting time: 1 mm/day. Pre-treat the surface with maxit prim eco 1170 before installing the reinforcing mesh.

#### Mixing by hand:

Fill a high-sided bucket with approx. 19.5 litres water/bag. Add the dry mortar carefully and stir at low speed until the powder has visibly absorbed the water. Then increase the speed and stir for approx. 40 seconds.

### Coverage rates

coat	mm	20	40	60	80	100
consumption	l/m <sup>2</sup>	21.3	42.8	64.1	85.4	105.1
Yield	m <sup>2</sup> /t	360	180	119.7	90	72
	l/t	7200				
m <sup>2</sup> /75 l bag		3.5	1.76	1.17	0.87	0.70

### Subsequent treatment/Coating

#### Subsequent treatment:

Protect fresh plasterwork from frost and rapid drying.

#### Coating:

Once the maxit eco 73 or purcalc 315 reinforcement plaster has been applied, allow to dry for 1 day per 1 mm layer thickness before applying a coat of maxit purcalc 315 and give it a textured finish. In addition to creating different

textures, it is also possible to smoothen it for subsequent painting or wallpapering. We recommend painting with maxit Solance. If using a different paint system, make sure that it is water vapour permeable.

### General information

This product must be applied by a suitably qualified installer. Contact us for technical support if you have any questions. Do not mix with other materials. Observe the provisions stipulated in EN 13941, DIN 18550/DIN EN 998-1, DIN 18350 VOB (German Construction Contract Procedures) Part C and DIN 18533.

Mortar produces a strong alkaline reaction with water. Make sure eyes and skin are protected. If skin or eye contact occurs, wash affected area thoroughly with water. Seek immediate medical advice in case of eye contact.

Please refer to the material safety datasheet. (For the current version, visit [www.maxit.de](http://www.maxit.de)).

After hardening, the product presents no risk to health or the environment.

### Storage

Shelf life is at least 12 months when stored on pallets in a dry place.

### Disposal

Do not dispose of with household waste. Do not allow to enter drains. Dispose of in accordance with official regulations.

### Silo and machine equipment

Can be mixed and applied with PFT G4 plastering machine or similar, silo mixing pump or by hand.

#### Plastering machine equipment:

- Mixing shaft for insulating plaster
- Screw pump D8/1.5
- Hose length: 20 m
- Hose thickness: 35 mm (do not reduce thickness)

#### Silo mixing pump equipment:

- Hose length: 40 m, hose thickness 35 mm
- Hose thickness: 35 mm (do not reduce thickness)

Supplied in special silos (part of the maxit SMP transport and feeder system) and in 75 l bags on pallets of 24 bags.

### Legal notices

The information provided in this document is based on our technical knowledge and experience at the present time.

#### maxit süd

Franken Maxit Mauermörtel GmbH & Co.  
Azendorf 63  
95359 Kasendorf  
Germany  
Tel.: +49 (0)9220/18-0  
[www.maxit.de](http://www.maxit.de)

#### maxit nord

maxit Baustoffwerke GmbH  
Brandensteiner Weg 1  
07387 Krölpa  
Germany  
Tel.: +49 (0)3647/433-0  
Fax: +49 (0)3647/433-380  
[www.maxit.de](http://www.maxit.de)

It must be regarded as a general guideline only. Owing to the large number of potential influences, it does not relieve anyone using or processing our products from the responsibility of carrying out their own tests and experiments, nor does it imply any legally binding assurance of certain properties or that our products are fit for a specific purpose. Responsibility for complying with any property rights, applicable laws or other requirements lies solely with the user. This datasheet invalidates all previous datasheets.

Technical specifications	
Indoor application	Yes
Outdoor application	No
Reaction to fire	A 1, non-combustible
Compressive strength after 28 days	$\geq 0.8 \text{ N/mm}^2$
Recommended coat thickness	min. 20 mm, approx. 30 mm per layer max. 150 mm
Yield	7200 l/t dry mortar
Fibres	Yes
Dry bulk density	approx. 125 kg/m <sup>3</sup>
Application temperature	Do not apply at site or ambient temperatures below +5 °C or above +30 °C, or when night frost is expected.
Thermal conductivity	$\lambda_{10, \text{tr, mat}} < 0.04 \text{ W/m}^*\text{K}$ for P=50% $\lambda_R 0.042 \text{ W/m}^*\text{K}$
Water absorption	W0
Water ratio	approx. 200 % corresponds to approx. 19.5 l / bag (75 l)
Water vapour permeability	approx. $\mu 5$

**maxit** süd

Franken Maxit Mauermörtel GmbH & Co.  
Azendorf 63  
95359 Kasendorf  
Germany  
Tel.: +49 (0)9220/18-0  
www.maxit.de

**maxit** nord

maxit Baustoffwerke GmbH  
Brandensteiner Weg 1  
07387 Krölpa  
Germany  
Tel.: +49 (0)3647/433-0  
Fax: +49 (0)3647/433-380  
www.maxit.de