

**akrosan**  
draft 230



#### **AKROSAN**

Highly vapour permeable lightened dehumidifying plaster for refurbishing and insulating damp masonry. Application by machine.

**repairing  
refurbishing and  
finishing**

**TECHNOKOLLA®**





27±1%



Spraying



5-30°C



20 mm

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## MAIN FEATURES

- No need for preliminary saline bloom inhibiting treatments
- Application by machine
- Optimum insulating capacity
- Lightened, ultra-low weight density
- Easily worked and finished
- Modulus of elasticity similar to that of the masonry
- Highly vapour permeable
- Eliminates surface efflorescence and mould

## APPEARANCE

Grey powder

## STORAGE

12 months from the date of manufacture if stored correctly in a cool, dry place in the original sealed, undamaged package.

## FIELDS OF USE

Treatment, refurbishing and thermal insulation of masonry subject to rising damp.

Can be used both indoors and outdoors on the following substrates:

- Solid bricks.
- Mixed and stone masonry.
- Blocks of non-crumbling tuff.

## NATURE OF THE PRODUCT

AKROSAN is a one-pack plaster with an ultra-low percentage of cement that exercises a dehumidifying action. It is highly vapour permeable, possesses a low weight density and an excellent insulating capacity. It contains special pore-generating agents, light aggregates and specially researched selected binders allowing the product to be applied both manually and by machine. For further details, ask our technical office for the safety brief or download it from our web site [www.technokolla.com](http://www.technokolla.com).

## OPERATIONS PRIOR TO APPLICATION

Completely remove the old, damaged and detaching plaster, especially from the joints between the bricks or stones that form the wall, which must be gouged out at depth.

The old plaster must be removed up to the maximum visible height of the rising damp, plus an extra two-three times the thickness of the wall, depending on the degree of humidity.

Proceed by generally cleaning the wall with a high-pressure water jet cleaner (200-400 bar). Pay particular attention to the joints.

Consult our Technical Office if hardened bitumen, salts and so forth must be removed.

## repairing refurbishing and finishing



## APPLICATION

At least 2 coats of the product must be applied. Proceed with an initial coat of bonding mortar followed by the plaster.

The bonding mortar must have a fluid consistency. After this, the plaster must be applied when the bonding mortar has set and therefore able to support the weight. Use AKROSAN in a semi-fluid consistency. It should be sprayed onto the masonry with a machine of the Putzmeister or PFT G5 type, according to the following technical parameters: indoor and outdoor substrates:

22 l/min plenum rate - indicatively 350 l/h of water in order to obtain thixotropic consistency;

15 m length pipe with 25 mm diameter (35 mm is strongly recommended). The product must be spread with a wooden straightedge and finished with a wooden trowel. The total thickness of the two coats (bonding mortar + plaster) must be at least 2 cm in all points. Approx. 1 kg/m<sup>2</sup> of product is required per mm of thickness.

## AMOUNT REQUIRED

approx. 20 kg/m<sup>2</sup> per 2 cm of thickness

## WARNINGS AND RECOMMENDATIONS

- It is essential to spread and finish the product with wooden tools. Iron or plastic tools must not be used since they close the pores in the plaster and inhibit its vapour permeability properties.
- Contact our offices if AKROSAN plaster must be applied by hand.
- Achieve a fine setting-coat finish using highly vapour permeable skimming products. After this, the surface can be painted with products that possess a very low resistance to the passage of vapour.
- Depending on the type of substrate to which the product is applied, small cracks may form owing to the strongly dehumidifying powers of AKROSAN plaster.
- It is advisable to measure the level of the humidity in the wall with a hygrometer in order to establish the exact height to which the plaster should be applied.
- Contact our Technical Office if a water head (groundwater) is present.

### *Drying precautions*

Keep the surface wet for a few hours after the product has been applied and protect the mortar from direct sunlight and wind.

### *Protection against the rain*

ARKOSAN must be protected from the rain for at least 6 hours after application.

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TECHNICAL DATA	VALUE	STANDARD
Density of applied product	approx. 1 kg/L	
Maximum diameter of aggregate	1,4 mm	
Compressive strength	1.5 - 5 MPa at 28 days (Class CS II)	EN 1015-11
Spread layer	approx. 160 mm	UNI 7044/72
Capillary absorption of water	6,8 kg/m <sup>2</sup>	EN 1015-18
Coefficient of water vapour permeability	$\mu \leq 15$	EN 1015-19
Bond	1,1 N/mm <sup>2</sup> FP:B	EN 1015-12
Electrical conductivity	0,267 W/m <sup>2</sup> K	EN 1745/2002
Fire reaction	Euroclass A1	EN 13501-1
Dangerous substances (Hexavalent chromium)	< 0,0002%	EN 196-10
Application temperature	Min. +5°C; max. +30°C	

## SPECIFICATION

Application to damp walls of plaster made with TECHNOKOLLA's AKROSAN, highly vapour permeable one-pack premixed plaster suitable for refurbishing masonry subject to rising damp, to be applied by machine without preliminary saline bloom inhibiting treatments in a layer at least 2 cm thick in all treated points.

The plaster must be applied up to a height corresponding to the upper level of the damaged surface, plus an extra two-three times the thickness of the wall, depending on the degree of humidity.

**Technokolla** strongly advises you to examine the “**product info**” document that completes and is an integral part of the contents of this data sheet. The document can be downloaded from our website [www.technokolla.com](http://www.technokolla.com) in the pdf format.

The technical-application suggestions in the technical data sheets, or provided either verbally or in writing by our personnel for customer assistance purposes, are the result of our current state-of-the-art and experience. Since we are unable to influence the building site conditions or actual work in any way, these suggestions are not binding and we are liable neither legally nor in any other way in relation third parties for the use made of this information. Thus, the information does not relieve the end user from his responsibility for testing our products so as to make sure they are fit for the required use. We therefore strongly advise the customer/ user to conduct all the appropriate tests prior to using Technokolla products in order to make sure that they are suitable for the purpose. The end user is also obliged to make sure that this technical data sheet is still valid and that it has not been substituted by a more recent edition. Thus, before using our products, we advise you to download the most recent version of the relative technical data sheet from our web site [www.technokolla.com](http://www.technokolla.com).

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