

PQ SILICONATE

DESCRIPTION

PQ SILICONATE is an aqueous solution of potassium methylsiliconate, mainly for water-repellent treatment of porous materials used in the construction industry.

ADVANTAGES

PQ SILICONATE gives the following benefits to the substrates on which it is applied :
Notable reduction in water absorption of the treated substrate and consequently :

- increased life expectancy
- limiting of moss development (green discoloration)
- helping combat efflorescence
- less sensitivity to frost-thaw cycles
- reduction in heat losses retaining the substrate's original appearance and gas permeability (the substrate « breathes »).

SPECIFICATIONS

Nature	aqueous potassium methyl siliconate solution
Aspect	clear to slightly cloudy liquid
Colour	pale yellow
Dry matter content (by weight), % ca.	47
Active matter, %, ca.	28
Specific gravity at 25°C, ca.	1.34
pH, approx.	13
Diluent	Water

APPLICATIONS

Treatment of fired earth products
Treatment of plaster

INSTRUCTIONS

Treatment of fired earth products

Roof tiles

Generally the procedure involves dipping whole pallets of tiles in a bath obtained by diluting between 0.5 and 1 litre of **PQ SILICONATE** (as delivered) in 100 litres of water. Immersion time: 1 to 5 minutes. Unassisted drying in a storage area.

Since each tile producer has their own procedures, before use it is important to correctly define :

- the most suitable siliconate concentration,
- the immersion time,
- the theoretical water-repellency level being sought.

A separation document deals with this application in more detail.

Bricks

Not recommended on finished work.

In the factory, bricks can be treated in the same way as detailed for roof tiles.

However, when treated bricks are used in construction, it will be necessary to add an adhesive agent to the mortar joints (styrene butadiene emulsion).

Damp course treatment PQ SILICONATE is injected at the base of the wall. Its role involves water-repellent treatment of the capillary network of the material to produce a damp course and so avoid capillary rise of water.

Depending on the materials used in the wall and on its construction, the solution used is obtained by diluting 10 to 30 litres of **PQ SILICONATE** (as supplied) in 100 litres of water. This will be sufficient to damp course between 5 and 25 linear metres.

A separate document deals with this application in more detail.

Treatment of plaster

A solution of 5 litres of **PQ SILICONATE** (as supplied) in 100 litres of water is sprayed on until the substrate is saturated. This will enable a surface area of between 1 to 5 m² to be covered.

Treatment of powdery substances

PQ SILICONATE is also used to treat powdery substances to give the following advantages: elimination of caking, increase in flowability and dispersability and reduction in water absorption.

The information and recommendations indicated on this technical data sheet reflect our current knowledge, laboratory experiments and normal experience. For this reason, our guarantee is limited to the quality of the product supplied. This company shall not assume any liability arising from misuse of our products.

Treatment of thermal insulation and sound proofing

Within our product range of silicone water repellents, **PQ SILICONATE** has the advantage of being able to be used, either incorporated in the product bulk, or by being sprayed on the finished materials.

This dilution chosen depends on the selected method and on the insulation's composition.

Water-repellent additive in paint

PQ SILICONATE can be used as additive in mineral paints in order to improve their water repellent properties will not affecting the water vapour permeability of the substrate.

Dosage: 1 to 5 litres of **PQ SILICONATE** in 100 litres of paint.

RECOMMENDATIONS

- **PQ SILICONATE** reacts slowly with ambient air, sometimes causing the formation of insoluble salts in baths.

The use of excessively hard water can also cause the same phenomenon to occur :

- In order to obtain the most effective treatment, **PQ SILICONATE** needs to have enough time to react. This processing time depends on the type of substrate and its gaseous porosity. This time will be around 3 to 7 days, but a certain degree of effectiveness is already achieved after drying for 24 hours. In the case of damp course treatment, between 6 and 12 months are required before the treatment becomes fully effective.

- In view of the alkaline nature of **PQ SILICONATE** the material used either to handle or apply it should not be (or have components) in aluminium or in light alloys.

For the same reason, avoid splashing the product on parts of the façade on light alloy or wooden frames and generally speaking on all materials that are sensitive alkaline products.

Contrary to common belief, it is possible to paint surfaces that have been treated with **PQ SILICONATE** as long as certain precautions are taken when using water-based emulsion paints (dilute as little as possible). This procedure gives a longer lasting coating.

STORAGE

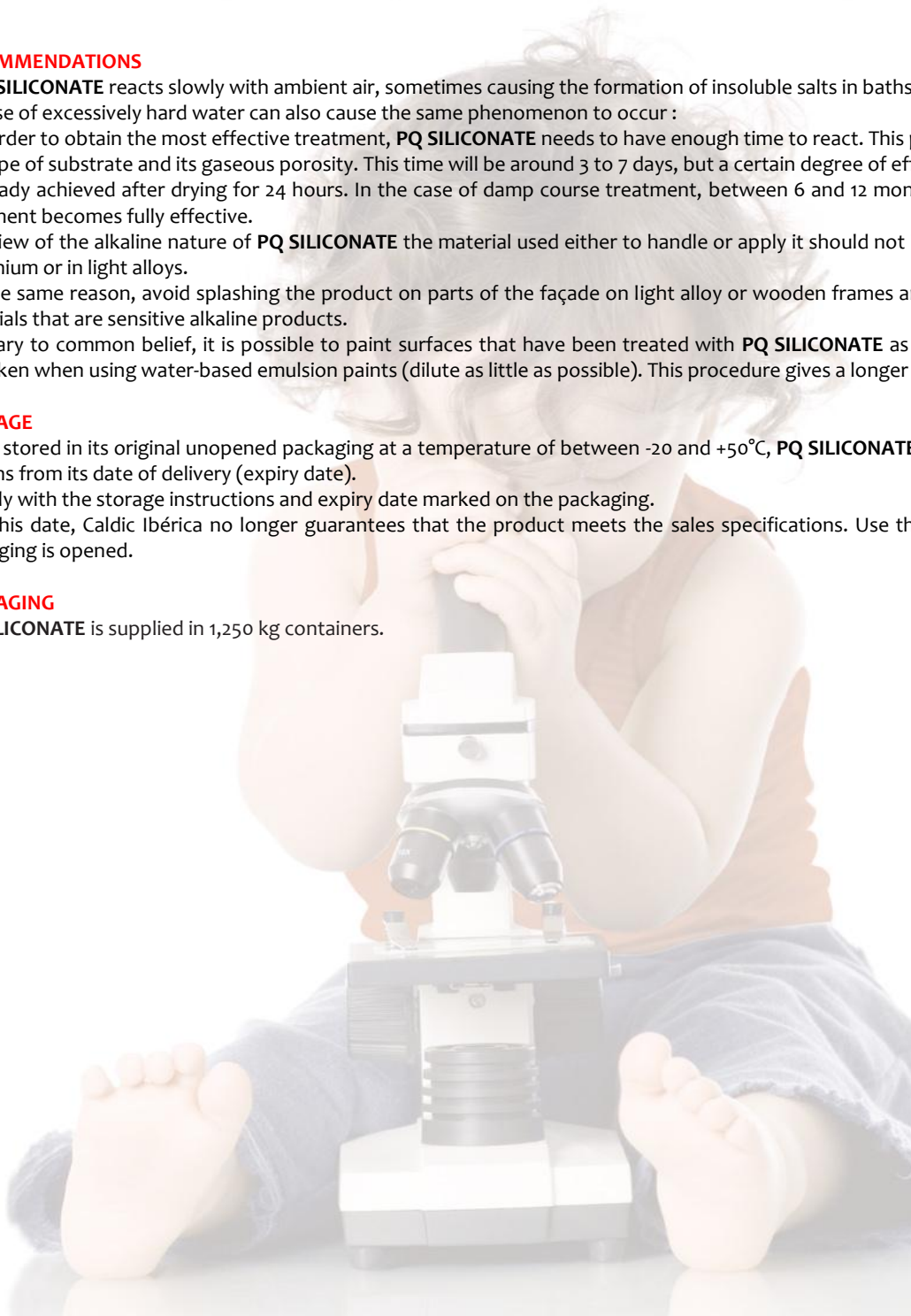
When stored in its original unopened packaging at a temperature of between -20 and +50°C, **PQ SILICONATE** may be stored for up to 24 months from its date of delivery (expiry date).

Comply with the storage instructions and expiry date marked on the packaging.

Past this date, Caldic Ibérica no longer guarantees that the product meets the sales specifications. Use the product quickly once the packaging is opened.

PACKAGING

PQ SILICONATE is supplied in 1,250 kg containers.



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