



SPARTYTE® MAR-grip

MINERAL FORMULATION MADE "AD HOC" FOR THE REPAIR AND REPRODUCTION OF MARBLE AND LIMESTONE AND FOR BEDDING MORTARS

Description SPARTYTE® MAR-grip is a ready-to-use product, which after mixing with ADHEWAT®/RM, gives a product that is applicable by trowel, or other normal hand tools. For the reparation and reproduction of marble or limestone the product can be formulated in a different way depending the characteristics of the substrate. These different formulations are distinguished by a number and a code.

The product is a mix of minerals and inorganic compounds. Hardening is based on the formation of hydrated mono-silicates.

The products have highly innovative characteristics and performances and at the same time are based on the standards developed by the Commission "**Cultural Heritage - NORMAL**" of UNI, as part of the Working Group "**Methods for the characterization of historical mortars and restoration**".

The rapid hardening allows finishing application between 5-15 minutes, and also the rapid application of several layers allow also thick applications in a short period.

The version **SPARTYTE®MAR-grip/POZZOLANICO** is formulated with notable addition of natural pozzolans and active natural and artificial silica. The evolution of mechanical strength is gradually progressing, obtaining values after 28 days. of about 20-30 days. The product carries also the advantages of a formulated pozzolanic material.

- Advantages**
- The typical consistency of SPARTYTE® MAR-grip allows an optimum adhesion, good application on vertical substrates and for overhead applications on soffits, ceilings, beams.
 - Can be applied with all normal hand tools, used to apply renders.
 - Absence of bleeding.
 - Excellent adhesion at the substrate.
 - Shrinkage compensated.
 - Maximum resistance towards aggressive chemicals.
 - Impermeable for water but water vapour permeable.
 - Stabiliser for salt and absence of salt efflorescence.

- Field of application**
- Repair, reproduction and sealing of limestone and marble. Product can be formulated "ad hoc" for a specific project providing a sample of the stones/marble is made available to the laboratory.
 - As general repair, consolidation and sealing.
 - As waterproof pointing mortar.
 - As a thin plaster (application thickness circa 1-2 mm.) on other plasters and substrates which are still in good shape. In the case these substrates are too fragile or weak the application has to be preceded by a consolidation with impregnating products (consult our Technical Department).
 - Thick repairs are possible, providing the substrate has good mechanical and anchoring properties. If necessary the substrate has to be roughened.

- Use**
- Make sure that the substrate is rough to ensured adhesion to the substrate. If necessary the surface can be primed with ADHEWAT®/RM or with SILAKTIV® (consult our Technical Department) or some preparation has to be made to roughen the surface.
 - Mix only with ADHEWAT®/RM. Amount liquid needed for a normal application: between 18 and 22% referring to the dry powder.
 - Mix a sufficient quantity that can be applied in 5 to 10 min after mixing.



- The surface can be finished with a trowel or by sponge trowel or by spatula depending on the desired result.
- For an optimal finish the product can be floated with a wet sponge trowel 20 min after application.
- Do not wet the surface once the application is finished: the product does not burn out in even in warm climatic circumstances.

Storage 12 months in original packaging, un opened, kept in dry and protected area between temperature from +5°C and +35°C.
Do not use the product of opened bags, if lumps occur.

Packaging Pails of 15 kg for the powder } This is an excess of liquid and not pre-packed! (use only
Cans of 5 kg ADHEWAT®/RM } the amount of liquid needed for the desired consistency!)

Technical properties (typical values)

- Setting time
 - At + 8° C: about 4 minutes
 - At + 20° C: about 10 minutes
 - At + 35° C: about 20 minutes (product is faster at cold temperatures!).
- Water vapour permeability $\mu = 40$
- Elasticity modulus 12.000-25000 N/mm²
- Strengths (average strengths are listed, the real value is an average of these values) N/mm²
 - Compression 15÷50
 - Flexural 6÷10
- Ultrasonic passage 3200 m/sec
- Adhesion > 1,5 N/mm²
- Dimensional stability The product is formulated to have a small expansion that compensates the drying shrinkage

Consumption Kg. 1,7 kg powder with 0.35 kg liquid are sufficient to apply 1 mm/ thick/m².

Safety indications Read carefully the instructions on the packaging or read the Material Safety Datasheet related to the product before applying.

The above information is based on our best experiences and lab results and on results of the application of the product in various fields. Tecnochem Italiana is not responsible for negative performances due to not proper use of the product or for defects due to elements not connected with the quality of the product included wrong storage.

Technical characteristic in this technical data sheet are up-to-dated periodically .Revision date of this technical data sheet is indicated below. Changes of this data sheet can be found in our web-site www.tecnochem.it where you can find the same technical data sheet updated in real time.

Emission date : 01/2006
Revision date : 01/2012

Rev No.3

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