

## RC AMONIT

### MINERAL RESTORATION MORTAR FOR NATURAL STONE

Laboratory KUL (Catholic University Leuven/Louvain) Reyntjens: 1992, test report PV n° R/27209F/92

Laboratory KUL (Catholic University Leuven/Louvain) Reyntjens: 1995, test report PV n° R/28207/95

### Natural stone restoration and imitation



#### ADVANTAGES OF RC AMONIT

- ✓ Good imitation of the existing natural stone
- ✓ Shrink-free curing
- ✓ Frost and UV-resistant
- ✓ Colorfast
- ✓ Easy processing, even in large thickness
- ✓ Good and tension-free adhesion

#### Description

Mineral mortar composed of ground natural stone (RC AMONIT-POWDER) and a mineral binder (RC AMONIT-LIQUID). Different types are available. These are adapted to the color, hardness and grain structure of the stone type.

#### Area of application

For the restoration of natural stone (except marble and granite), bricks and terracotta. Fully cured repairs with RC AMONIT can be processed in the same way as the original stone. This allows historic facades and monuments to be restored in the most lifelike way.

#### Properties

- Good imitation of the existing natural stone, both in terms of color and texture;
- Shrink-free curing (in contrast to hydraulic systems);
- Frost-resistant;
- UV-resistant and ages like natural stone;
- Colourfast;
- Easy processing, even in large thicknesses;
- Good and tension-free adhesion.

#### Substrate

All loose parts must be removed: the adhesion surfaces of the stone to be repaired must be hard, clean and dry. Deepen the damage to +1 cm below the surrounding stone surface.

For extensive repairs, mechanical anchors must be placed with stainless steel screws that may be mutually connected by brass wire.

If the stone has lost its internal cohesion, it must first be consolidated with ethyl orthosilicate (orthosilicic acid ethyl ester, RC STONE REINFORCER). The stone reinforcer is applied onto the stone until saturation. Work can be continued after the cure reaction is complete (after 14 days). Only work on dry rock that is free of dust, paint or still active silicone treatment.

RC AMONIT must not be applied on frozen surfaces. The ambient temperature and the temperature of the surface to be repaired must be at least 5°C.

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## Application instructions

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The surface to be repaired is pre-wetted with RC AMONIT-LIQUID. When repairing bluestone, NO prior pre-wetting should be done with the RC AMONIT-LIQUID. This causes indelible stains! No puddles may form when applying the liquid. The time between the application of the primer and the repair mortar should be kept as short as possible to avoid capillary absorption of the primer.

### Preparing the mortar

- Mix the RC AMONIT-POWDER with the RC AMONIT-LIQUID until a semi-liquid mass is formed;
- Mix 2,5 parts by volume of powder with 1 part by volume of liquid. Due to the rapid curing of the mortar, make small quantities.

### Application of the RC AMONIT mortar

- Press the mortar firmly with a trowel and fill immediately until the repair protrudes 1 to 2 mm above the profile to be restored;
- After ± 10 minutes the repair has hardened sufficiently to be scraped off with the trowel until the desired profile is approximated;
- Because the processing time is maximum 10 minutes, only a quantity of mortar may be prepared that can be processed in a short period of time.

### Finish

- After a few hours, the repair is already sufficiently cured to be processed in detail with sculpting tools; now the repair can even be ground or chiselled like natural stone.

**Note:** The repair cures very quickly. Nevertheless, the mortar remains moist for a very long time. This makes the color appear darker than that of the surrounding rock. After complete drying and after grinding or light scraping, the color uniformity will be perfect.

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## Consumption

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2,20 kg/dm<sup>3</sup>.

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## Standard types

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In addition to the existing standard types, Reynchemie can offer a number of special stone types, and the natural stone you are looking for can be custom created for your construction site. Coloring can be done on site: only use RC AMONIT pigments for this!

Available mineral pigments: yellow ochre, red ochre, black, amber, burnt earth ...

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## Color determination

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The color of the RC AMONIT-POWDER is compared to the color of the surface to be restored. This involves rubbing some powder on the stone surface with the thumb. If minor color adjustments need to be made, the correct color is most easily achieved by mixing with a darker or lighter tinted RC AMONIT-POWDER of the same type. Color adjustments are also possible with RC AMONIT pigments that are mixed into the dry powder. It is advisable to assess the end result on the basis of tests. Under no circumstances may pigments be added to the prepared mortar or pigments other than those prescribed by the manufacturer may be used.

## Technical information

Density:	2,03 - 2,22 kg/dm <sup>3</sup>
Adhesion (function of stone type; average):	0,6 N/mm <sup>2</sup>

Dynamic elasticity modulus (after 28 days) according to NBN B15-229	
Fine grain:	15000 N/mm <sup>2</sup>
Coarse grain:	24000 N/mm <sup>2</sup>

Static elasticity modulus (after 28 days) according to NBN B15-203	
Fine grain:	8300 N/mm <sup>2</sup>
Coarse grain:	16200 N/mm <sup>2</sup>
Curing shrinkage:	Zero (<0,001%)

Flexural and compressive strength according to NBN B12-208:	3 - 4 N/mm <sup>2</sup>
Resistance to compression:	6,4 (fine grain) to 12,5 (coarse grain) N/mm <sup>2</sup>
Porosity:	24,9 - 2,4%A
Water absorption coefficient:	0,84 - 0,86
Thermal expansion coefficient:	8,35 - 8,76 $\mu\text{m}/\text{m}^{\circ}\text{C}$
FGC factor:	< -2,52 (class 5)
Usage duration after mixing:	10 minutes in 15°C
Editable or chippable after:	24 hours
Dosage:	Mix 2,5 parts powder with 1 part liquid
Frost resistance:	Very good, no damage

## Security

Consult the most recent Safety Data Sheet.

## Remarks

- RC AMONIT is not suitable for concrete repair.
- Only apply the mortar between 5°C and 25°C.
- The minimum layer thickness is 1 cm.

**ATTENTION:** ONCE THE HARDENING PROCESS HAS BEEN ENTERED, NO MORE LIQUIDS MAY BE ADDED. Never let iron objects come into contact with the mortar.

Color corrections can be performed by mixing RC AMONIT pigments into the powder component.

## Cleaning of equipment

With water immediately after use before the mortar has hardened.

## Storage / Shelf life

1 year in original sealed packaging.

## Packaging

Set of 27 kg: 20 kg powder (item no. 40100) + 7 kg liquid (item no. 40200)

Set of 10 kg (item no. 402412): 7 kg powder + 3 kg liquid

Set of 5 kg (item no. 402413): 3,5 kg powder + 1,5 kg liquid



## Photos



### Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Reynchemie products, are given in good faith based on Reynchemie current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Reynchemie recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Reynchemie reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.