COOL BARRIER GRIP CREME

MASONRY WATER REPELLENTS

Product description

COOL BARRIER GRIP CREME is aqueous, solventless, creamy, silane-based water repellent. It is a high quality specialty product for hydrophobic impregnating of both normal and reinforced concrete.

Special features

COOL BARRIER GRIP CREME is characterised by: - excellent penetration

- solventless, aqueous and environmentally compatible
- low volatility
- high resistance to alkalis
- thixotropic and may so be applied without loss of material

Treated concrete will have the following permanent properties:

- greatly delays chloride and water absorption by concrete
- no loss in breathability
- improved durability against freeze-thaw de-icing salt stress
- enhanced durability
- provides good adhesion for paints

COOL BARRIER GRIP CREME is a unique impregnating agent because it is thixotropic. It has an outstanding ability to impregnate high-quality concrete and reinforced concrete. Unlike conventional liquid products, COOL BARRIER GRIP CREME can be applied in just one coat of the desired thickness (at the very most, two coats). The silane active ingredient penetrates the substrate within 30 minutes to several hours, the exact time depending on the porosity and thus quality of the concrete. On reaction with the substrate, it releases ethanol and is converted into a polymeric silicone resin. A creamy layer forms initially, but this then disappears completely. As the active ingredient is the same as in conventional liquid impregnating agents, impregnation with COOL BARRIER GRIP CREME does not clog the pores or capillaries, nor does it affect its ability to "breathe".

COOL BARRIER GRIP CREME is designed to penetrate deeply into concrete so as to afford optimum protection against absorption of water and pollutants as well as freeze / thaw cycles.



This effect should not be confused with the "beading" effect imparted by impregnating agents that is often referred to as water repellency. Beading is only a surface effect, and it plays a secondary role in protecting the substrate. Concrete treated with COOL BARRIER GRIP CREME has initially only a moderate beading effect but this increase after the surface has been wetted.

Application

COOL BARRIER GRIP CREME is recommended particularly for impregnating and priming concrete and reinforced concrete used in building bridges, roads and buildings In principle, COOL BARRIER GRIP CREME may be used on any alkaline substrate that has been treated previously with concentrated or undiluted impregnating agents, such as alkoxysilanes.

Processing

The work performed (preparing the concrete surface, setting up a reference surface, application and quality control) must follow the applicable regulations.

- Concrete should not be impregnated until at least four weeks after it has been produced so that the setting of the cement is not affected.

- New surfaces that are still unsoiled must be cleansed of coarse particles and dust deposits by sweeping or, if necessary, using compressed air. Surfaces already weathered, and those heavily soiled by oil, rubber residue, etc., must first be cleaned using superheated steam or high-pressure water before commencing treatment. It is imperative that the water used be siphoned off immediately to prevent saturation of the concrete.

- Impregnation should always be performed on superficially dry concrete, i.e., when the surface of the concrete appears evenly dry, no more damp patches are visible and the moisture content equilibrium is established. To this end, moisture in the surface zone of the concrete is measured using a suitable technique. The surface-zone moisture content of the concrete (from the surface to a depth of 20 mm) should not exceed 4 wt%. - COOL BARRIER GRIP CREME best applied to the concrete by the airless technique, undiluted and in the desired thickness. Brushes, lambskin rollers or spatulas may be used for smaller areas.

Up to 400g/m² may be applied in one operation to vertical surfaces and roofs, without loss off material. The exact amount depends on the absorbency of the substrate.

At higher application rates, the impregnating agent might liquefy at the top of the concrete and it might start to run off. A second coat of COOL BARRIER GRIP CREME may be applied at any time, but is usually unnecessary.

- In the event of unexpected rain, cover surfaces already impregnated and halt all further impregnation. COOL BARRIER GRIP CREME should not get into direct contact with bitumen. The resistance of insulant against COOL BARRIER GRIP CREME has to be determined depended on temperature.

Storage

The 'Best use before end' date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons. The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.



Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from Abolin Co Greece subsidiaries.

Product data

Typical general characteristics	Inspection	Value	
	Method		
Appearance		white or yellowish creme	
Active substance		approx. 80 wt. %	
Density		approx. 0,9 g/cm ³	
Flash Point	ISO 3679	64 °C	
These figures are only intended as a guide and should not be used in preparing specifications			

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0921		
Abolin Co Greece		
Athens 18 Galaxia Str		
12462 Haidari		
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EN 1504-2:2004		
Surface protection products - Hydrophobic impregnation		
EN 1504-2:ZA.1a		
No. 0921 - CPR - 2171		
Depth of penetration	Class II ≥ 10mm	
Water absorption and resistance to alkali	Absorption ratio < 7,5% compared with the untreated specimen < 10% after immersion in alkali solution	
Drying rate for hydrophobic	Class I > 30%	
impregnation		
Loss of mass after freeze-thaw salt stress	Fulfilled (weight loss at least 20 cycles later than treated sample)	
Release of dangerous substances	NPD	

The management system has been certified according to EN ISO 9001 Abolin Co Greece 18 Galaxia Str. Afaia Skaramaga Haidari 12462 Tel: 0030 210 5575568 Fax: 0030 210 5570616 EMAIL: abolin@abolinco.com WEB: <u>www.abolinco.com</u>