



The Chemical Company

PROTECTOSIL® BHN

Water Repellent Material for Absorbent Surfaces

Description of Product

PROTECTOSIL® BHN is a monomeric alcyalcocsilane based, single component, non-solvent, low viscosity, transparent, ready to use water repellent material.

Fields of Application

- On concrete surfaces (beams and tiles of bridge columns, sea structures, exterior surfaces of reinforced concrete buildings, etc.).
- On brick and roof tile surfaces (exterior surfaces of masonry structures).
- On tile surfaces.
- On exteriors as water repellent against dusting and efflorescence.

Features and Benefits

- Single component, easy to apply.
- Since it is transparent, it does not change the look and color of applied surfaces.
- Breathing, water vapor permeable.
- Prevents penetration of water to surfaces and acts as a shield against harmful effects of water soluble salts like chlorides.
- Superior penetration.
- High alkali resistance.
- Stops alkali-silicate reactions in the concrete.
- Covers micro cracks up to 0.3 mm width.

- Conforms with ZTV SIB 90 standards of German Ministry of Communication.
- High freezing-thawing resistance.
- Does not contain solvents.

Application Procedure

Preparation of Substrate

Application surface has to be dry and surface must be cleaned off all kinds of damaged, loose concrete particles, oil, paint, lime, fungus, moss, curing materials, efflorescence, asphalt, etc. traces that can prevent penetration of the material to the concrete. Pressurized water jet or mechanic abrasion methods (sand blasting, shot blasting) may be used for surface preparation. If the application will be made on newly poured concrete, then 28 days must be waited for curing to be completed. Damaged concrete surfaces have to be repaired by **Emaco®** series repair mortars before **PROTECTOSIL® BHN** application. If there is no sufficient information about pre-applied chemicals on the surface, then material should be tested on a small area before application. Plants near application surface should be protected from contacting **PROTECTOSIL® BHN**.

Technical Data

Structure of the Material	Monomeric alcyalcocsilane
Color	Transparent
Density (DIN 51757)	0.88 kg/liter
Viscosity	0.95 mPa s
Breaking Index	1.4000
Explosion Point (DIN 51755)	+63°C
Boiling Point (DIN 51755)	+186°C
Application Ground Temperature	+5°C +45°C



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Application Method

PROTECTOSIL® BHN is a single component and ready to use material. It must be applied by spraying after making necessary surface preparations. Pressure of the spraying equipment has to be low and a suitable nozzle must be used.

PROTECTOSIL® BHN must not be atomized during spraying and no brush should be used during the application. Enough material should be sprayed on the surface during the application and wet layers should be observed on surfaces.

Coverage

150 - 300 g/m² depending on surface absorption.
Watchpoints:

- **PROTECTOSIL® BHN** must not be used on non-absorbing surfaces like glass, wood, plastic and metal.
- **PROTECTOSIL® BHN** must not be atomized during spraying and suitable spraying equipment should be used. No brush should be used during the application.
- Environment and surface temperature should not be below +5°C and over +45°C during the application.
- Before the application, 24 to 72 hours must be waited for surfaces to dry after heavy rain or water jet application.
- If rain is forecasted in 4 hours, application should not be made.
- **PROTECTOSIL® BHN** is delivered in ready to use packages. Solvents or water should not be added to the mixture during the application.

Cleaning of Tools

All the tools and equipments must be cleaned by thinner after the application.

Packaging

25 kg drum.
200 liter barrel.

Storage

Must be stored in unopened original packing, and in cool and dry environment protected from freezing. In short-term storing, maximum 3 palettes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed on top of each other.

Shelf Life

12 months after the production date under appropriate storing conditions. Opened packages have to be stored by tightly sealing the cover, and must be used in shelf life.

Health and Safety Precautions

Work cloth, protective gloves, goggles and masks concordant with Work and Worker Health rules must be used during the application. Due to irritant effects of the non-cured material, avoid contact to skin and eyes during storing and application. If such a contact occurs, it must be washed by soap and plenty of water. Consult a physician urgently if swallowed. Food and drink must be kept outside the application areas. Must be stored away from children. Please look at the Material Safety Data Sheet for detailed information.

Disclaimer

This information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience. However, BASF Yapı Kimyasalları San. A.S. is only responsible from the quality of the product. BASF Yapı Kimyasalları San. A.S. cannot be hold responsible from the results caused by applications of the product not in accordance with the written suggestions of how and where to use the product and/or faulty applications. This technical document is valid until a new one is printed and abates the previous editions. 01/2008.