



HydroBloc®Si 741

Building material hydrophobising with reactive siloxane

By treatment with HydroBloc®Si 741, absorbent mineral building materials become permanently water-repellent (hydrophobic). The capillary water transport in the pores of building materials is practically completely inhibited by HydroBloc®Si 741.

HydroBloc®Si 741 consists of a solution of pure, highly reactive silanes in low-odour, aliphatic hydrocarbons with a high flash point. The product does not contain any resins or diluents. Due to special additives and the special solvent formulation, the liquid product penetrates deeply into even the finest capillary pores.

HydroBloc®Si 741 reacts (cross linking) with the mineral substrate during drying. The resulting polysiloxane is thus anchored to the building material in a practically undetachable manner and resists the effects of UV radiation and air pollutants, even in an industrial atmosphere.

Impregnations made of HydroBloc®Si 741 are tack-free, do not form films and do not impede the diffusion of water vapour out of the building material.

HydroBloc®Si 741 fully complies with the technical requirements of ZTV SIB-90 and WTA* for hydrophobing agents in Germany.

*) WTA = Wissenschaftlich-technischer Arbeitskreis für Denkmalpflege

Function The treatment with HydroBloc®Si 741 reduces the natural water absorption of absorbent, mineral building materials to a few percent and provides effective protection against moisture penetration, for example through driving rain. Damage caused by moisture, efflorescence caused by water-soluble salts, growth (moss, algae) and similar phenomena are prevented.

The reduced water absorption also reduces the thermal conductivity of the building materials and thus considerably improves the thermal insulation of the treated building structures. Hydrophobing with HydroBloc®Si 741 therefore saves expensive energy in the long term.

Contamination by capillary stored dust is significantly reduced, the breathability of the building material is not affected and the optical effect of the treated structures remains unchanged for years.

HydroBloc®Si 741 is explicitly intended for the water-repellent (hydrophobic) treatment of absorbent, mineral substrates. The product is not suitable for sealing surfaces against pressing or stagnant water and should not be used as an injection agent for making horizontal barriers.

Application Processing

The underground must be clean, dry and free of loose and brittle parts. After the cleaning with high pressure machines or sharp water-jet the surface must dry minimum 2 - 3 days before the application of HydroBloc®Si 741.

HydroBloc®Si 741 is particularly suitable for the water-repellent treatment of concrete, sand-lime brick, brick masonry, gas concrete and absorbent natural stone. If the surface is only slightly absorbent - e.g. granite or other crystalline stones - care must be taken to rub off excess material (material not absorbed by the surface) before it dries. Otherwise the excess of HydroBloc®Si 741 will lead to film formation on the stone surface. It is always advisable to create test areas on such surfaces.

HydroBloc®Si 741 should be flow coated, sprayed pressure-less or casted but never painted with roll or brush.

A sufficient amount of material must be applied to create a 30 - 50 cm long liquid film on the building material surface. This is the only way to ensure that the building material is soaked sufficiently deep in the impregnating agent.

Adjacent components must be protected from contamination with HydroBloc®Si 741 by suitable measures (masking, covering). When fresh HydroBloc®Si 741 can be removed with almost all solvents. Reacted product, on the other hand, can hardly be removed!

The consumption depends on the sucking capacity of the building material and the roughness of the surface. According to the material the consumption varies between 0,2 - 1,5 Litre /m². The precise consumption must be developed by object testing.

Properties

Name	: HydroBloc®Si 741
Application	: Hydrophobing agent for wall building materials
Chemical characteristic	: Solution of alkylsilanes
Solvent	: Mix of Isoparaffine
Delivered product	: Ready to use
Processing time	: Not applicable
Processing temperature	: 0 - 40° C
Density	: Approx. 0,85 gr/ml (20°C)
Colour and appearance	: Weak yellow, transparent liquid
Odour	: Very weak, typical

**Storage
Safety
Disposal**

HydroBloc®Si 741 doesn't contain any toxic contents, but flammable solvents with high flash point. We recommend protective gloves and glasses meanwhile processing. Additionally we recommend a eyewash bottle with water in case of emergency.

The product is designed for outdoor application therefore there are no protective measures necessary because of the solvents.

Naturally it is not allowed to smoke meanwhile work and keep the material away from fire and open light. The used spraying pumps and flow coating equipment used should comply with the technical standard for paint spraying equipment.

Originally closed minimum storage time 12 month after delivery. Already open cans should be used within 4 weeks and should be closed immediately after use. Tools and equipment could be cleaned with HydroSolv®520.

Keep away from children and unauthorised persons. Material which is stored in other than the original cans must be sufficient labeled.

Liquid leftovers and empty cans are special waste and must be treated after local law.



These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

ATI-HydroBloc®Si 741 |01|2020
© ARCAN GmbH
All rights reserved