



HydroBloc®Polygrout 650

Concentrate; for highly elastic Polyurethane HydroGels

HydroBloc®Polygrout 650 is a hydrophilic, water-reactive PU-Prepolymere. The product can easily be mixed with water. Emulsions with very low viscosity are the result of this process. These emulsions are setting very fast to highly elastic hydro-gels.

The reaction products are water containing plastics and polyurea structures. These structures are swellable in contact with water until they reach a defined volume. The material is mechanically stable, elastic, tear-resistant and the adhesion on nearly all substrates is excellent.

When HydroBloc®Polygrout 650 is mixed with water ≤ 1:4, the mixture expands, producing fine-cell foams. The foam volume depends on the amount of water mixed in. The maximum foam volume is reached by mixing HydroBloc®Polygrout 650 in ratio 1:1 with water.

Mixing ratios $\geq 1:4$ react to homogeneous products. With increasing water content in the reaction mixture, the strength of these reaction products naturally decreases. Optimum results can be reached by mixing 1 part HydroBloc®Polygrout 650 with 5 - 10 parts water. HydroBloc®Polygrout 650 is starting to flocculate by mixing it with more than 15 parts of water. such mixtures are no longer usable.

Application Typical applications are leakage sealing in structures and geologic structures (gel membrane injections), additionally external sealings of underground areas, sealings of pipe couplings and damaged spots in waste water pipes. waterproofing wherever the affected areas are permanently located in a damp environment and the injected sealant cannot dry out.



HydroBloc®Polygrout 650 mixed with water as a reactant, is injected into the areas affected by leaks by the usual methods using a high-pressure process. The rapid reaction between resin and water usually requires the use of injection pumps with suitable or adjustable mixing ratios for the two components, master resin and water. The mixing itself takes place directly at the injection point by bringing the two components together in a mixing tube, preferably with a static mixer as mixing element.

Additives to the resin component are not necessary. HydroBloc ®Polygrout 650 is easy to process and uncomplicated in handling.

Detailed information on processing can be found in the processing instructions for HydroBloc®Polygrout 650.

Processing with 2 component injection machines. Special requirements to machine: None



Properties

Polymers Diisocyanate (PUR-Prepolymer) Characteristic **Packaging** Ready to use, liquid

Colour Yellow, transparent, slightly opaque

Odour Weak typical

Viscosity 800 - 1600 mPa.s (at 20°C) Density Approx. 1,1 gr/ml (at 20°C)

Safety Storage

HydroBloc®Polygrout 650 is harmless, used according to instructions. We recommend to wear protective clothing and safety goggles. Attend the usual hygienic instructions. Adhere national instructions, for example of employers liability insurance association, for handling and processing with injection agents.



Rinse eyes with a lot of water for about 15 minutes after contact and call directly a doctor.

The vapour pressure of the contained Isocyanates in HydroBloc®Polygrout 650 is low. Negative reactions can not be excluded for persons which react allergic by contact with isocyanates.

Persons with known hypersensitivity against Isocyanate should not work with this product or any product with reactive polyurethane connections.

HydroBloc®Polygrout 650 reacts easily with water, like all other NCO-prepolymers. Even traces of humidity influence the storage life. Close opened cans immediately tight after opening. HydroBloc®Polygrout 650, stored dry and cool, is storeable for at least 12 months.

The product is an organic substance and flammable. This property must be observed during storage. It must also not be stored together with food and must be kept in such a way that it is not accessible to children and unauthorised persons.

Reacted HydroBloc®Polygrout 650 is physiological harmless. Dispose it like usual domestic waste. Mix product leavings with water to make them harmless. Liquid leavings or casks with liquid leavings are

hazardous waste. Dispose them under regard of local instructions for such waste.

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.

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ARCAN Waterproof

ARCAN GmbH Spezialbaustoffe

Kleinniedesheimer Strasse 19 D-67240 Bobenheim-Roxheim Phone: +49 (0)6239 - 99 78 20

Mail: office@arcan.biz Web: <u>www.arcan.biz</u>

