

HydroBloc[®] 516

Hard, tough, fast 2 component - PU-Injection foam

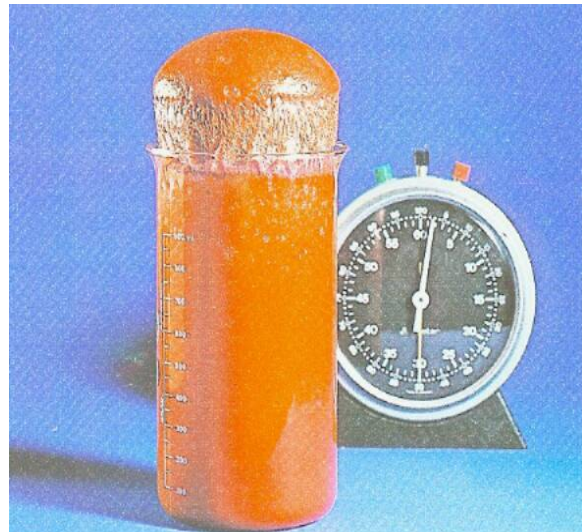
HydroBloc[®] 516 is a high reactive 2 component foam system. The material reacts directly after mixing A with B component. The controlled foaming activity creates a fine cell structured and liquid proof foam with large hardness and wood like structure. The foaming capacity is very good.

HydroBloc[®] 516 is recommended for sealing and backfilling of wide joints, cracks, gaps and clefts. For bigger cavities, the stabilisation of cohesion less sand and unfixed rocks in tunnelling and mining.

The mixing ratio is 1 : 1. All commercially available 2 component machines are suitable, processing with single component pumps is not possible.

The processing time (rising time of the foaming reaction) approx. 40 s as delivered - could be reduced with HydroCat[®] 514 accelerator. An adjustment with longer reaction times is also available.

**Large foaming
capacity
and
fast reaction**



Processing HydroBloc® 516 is a fast reacting 2 component system. The material is ready to use and processing directly out of the cans is possible. There exist no special requirements for the construction material of the injection pumps.

An additional rinsing pump should be provided for the mixing head for possible interruptions of the injection. We do not recommend the still frequently used procedure - rinsing with one of the two resin components - for economic reasons (waste of material) and because of the inevitable environmental pollution, but it is possible.

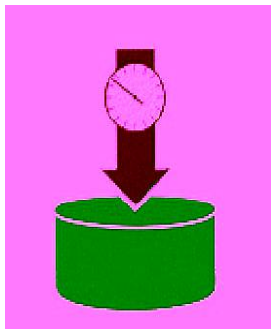


A special property of HydroBloc® 516 is the controlled change in strength from tough-elastic to stone-like. Immediately after the end of the rising time, the foam is tough-elastic, which favours post-injection. After approx. 2 h the reaction product has reached its final strength and is very stable and wood-like.

We recommend our security solvent HydroSolv® 520 for flushing and equipment cleaning such as hoses, pumps and mixing equipment.

We don't recommend other solvents - such as universal thinners or paint thinners - because some ingredients could damage or react with the foam resin. This leads to damages of the equipment.

Properties



Product delivered	2 components
Component A	Polyol mixture
Component B	Polymere Diisocyanate MDI-Type
Mixing ratio	1:1 by volume
Density (mixture 1:1)	Approx. 1,05 g/ml
Viscosity	Approx. 450 - 550 mPa.s (at 20°C)
Start of the reaction	Approx. 20 s (at 20°C)
Rising time	30 - 40 s (at 20°C)
Setting time	2 - 4 minutes (after mixing)
Volume weight*	Approx. 45 - 50 kg/m ³ (free foam)
Foam factor (volume capacity)	≥ 20

If used according to regulations - as injection resin - the HydroBloc® 516 is mostly harmless. We recommend the use of the usual security devices such as protective clothes and goggles. Follow the recommendations of the government safety organisations for handling and processing of injection resins. Dirt caused by hardened foam can only be removed mechanically from the skin surface.

**Work safety
Storage
Disposal**

HydroBloc® 516 reacts in delivery form with water such as all polyurethane resins. Open cans must be closed immediately. Stored in a cool and dry place, in unopened original cans, the self life of this product is minimum 12 months.

In frost conditions, the B-component can solidify to a wax-like mass. This change can be reversed without loss of quality by careful heating (e.g. in a water bath, not over 50°!).

The product is not flammable but combustible. This property must be observed during storage. It must 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 material is physiologically completely harmless and can be disposed of as household waste. Product residues can therefore be rendered harmless by mixing the components. Liquid residues and empty containers with liquid adhesions are hazardous waste and must be disposed of according to local regulations for such waste.

Recommended accessories and additives

HydroCat® 514

Accelerator; for quicker reaction and shorter setting times.

Added into component A, amount 0,1 - 2%. A 2% addition of HydroCat® shortens the rising time by 10 seconds.

HydroSolv® 520

Highly efficient flushing material. Used for equipment and hose cleaning.

The material is an environmental friendly security solvent with high flame point. Harmless, non toxic or harmful to health, without labelling or transport restriction.

HydroMoll® 522

Efficient and low-priced care and conservation material for pumps and hoses. Combination made of special weakeners and additives. Will be filled into the complete system and left until next use. Avoids active the gluing of valves and gaskets. No labelling required.

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: www.arcan.biz

passion to invent 