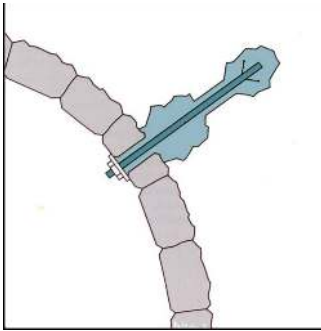


## HydroBloc®OM 597

Organo mineral resin for mining



**HydroBloc®OM 597 is a hard and tough injection resin used for stabilisation of loose structures in mining and tunneling. HydroBloc®OM 597 is not inflammable, not flammable and hardens even in high volumes without dangerous exothermic reactions. The stability and glue adhesion on mineral substrates, metal and coal is excellent. HydroBloc®OM 597 can also be used in wet areas.**

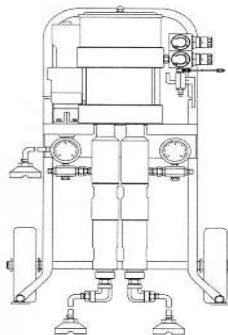
HydroBloc®OM 597 Organo mineral resin consists of 2 components, anorganic, solvled silica and polymeric isocyanates. After mixing, they react very fast to a homogeneous body, similar to stone. This process creates hybrids of condensed silicas and polyurea.

- Application**
- **Hardening and stabilisation of refractioned seams in mining**
  - **Secure driving in tunnelling**
  - **Hardening of soil and granular soil**
  - **Gluing of anchors of steel and GRP**

### Processing

HydroBloc®OM 597 is a typical 2C-system. The mixing ratio is 1:1 (volumetric). Due to the high reactivity, the material must be processed with 2C-pumps (with separate delivery of the components to the mixing head). We recommend a mixing head with static mixer (at least 18 mixing elements). There are no special requirements for the materials of the equipment used.

The typical gel time of HydroBloc®OM 597 is 100 - 135 seconds at 20 °C. The resin then stiffens to a pasty mass and sets to the stone-like material in approx. 3 - 4 minutes.



**Important:** It is recommended to homogenise the A-component briefly before application. If work is interrupted, the mixing head must be rinsed thoroughly. Clean water with an addition of approx. 3%-5 % of a commercial detergent is well suited as a rinsing agent.

You can use this detergent as well for cleaning of the pump and hoses of A component. ***Do not use it*** for cleaning of the B component. Herefor we recommend our safety solvent HydroSolv® 520.

The reaction behaviour of HydroBloc®OM 597 depends not that much on temperature than classic PUR and EP resins do. The viscosity of both components rise when temperature is falling. If the injection should be done below -5 °C, please contact our application technician.

<b>Properties</b>	<b>Component</b>	<b>A</b>
	<b>Aspect</b>	<b>Cloudy, weak yellow liquid</b>
	<b>Density</b>	<b>1,4 - 1,5 g/ml at 20°C</b>
	<b>Viscosity</b>	<b>~ 400 mPa.s at 20°C</b>
	<b>pH</b>	<b>11 +/- 1</b>
	<b>Component</b>	<b>B</b>
	<b>Aspect</b>	<b>Dark brown, clear liquid</b>
	<b>Density</b>	<b>1,15 - 1,2 g/ml at 20°C</b>
	<b>Viscosity</b>	<b>180 - 200 mPa.s at 20°C</b>
	<b>Gel time (tG)</b>	<b>100 - 135 seconds, at 20°C</b>
<b>Setting time</b>	<b>3 - 4 Minutes</b>	
<b>Reaction product</b>	<b>Hard elastic, shrinkage free</b>	
<b>Bonding strength</b>	<b>Approx. 5 N/mm<sup>2</sup></b>	
<b>Fire behaviour</b>	<b>A2 DIN 4102 (not flammable)</b>	
<b>Foaming factor</b>	<b>Does not foam</b>	

**Storage** HydroBloc®OM 597 is harmless if used right. Please wear safety clothing and protective goggles during work. Avoid contact with eyes and skin. Pay attention to the industrial protective regulations.

**Work safety**

**Disposal**

Store the material in dry and cold place, keep away from children and unauthorised third parties. Do not store together with food the materials are unfit for consumption through human or pet.

HydroBloc®OM 597 is an aqueous silicate solution, non-flammable and without tendency to dangerous reactions. The containers must be kept closed, the product reacts with carbon dioxide from the air and is damaged / unusable by contact with air.

The B-component is combustible, but not flammable. The product is a modified diisocyanate and, like all these compounds, reacts very easily with water and air humidity. Cans must always be tightly closed. In contact with water, the material produces CO<sub>2</sub> and can build up considerable pressure.

The HydroBloc®OM 597 is storage stable for 12 month after delivery date. The safety datasheet contains more and detailed information about the handling of the product. The reacted material could be disposed as building rubble. In case of left over material, cure it through mixing both components. Please behave after the local rules.

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](mailto:office@arcan.biz)  
Web: [www.arcan.biz](http://www.arcan.biz)

passion to invent 