



## HYDROGUARD 101-108

### Injection resins for waterproofing.

#### Characteristics

HYDROGUARD 101-108 injection grade resins are a mixture of various polyester polyols and additives, which form a viscous polyurethane resin as a result of the reaction together with the hardener (component B).

**HYDROGUARD 101** is a 2-component injectable waterproofing material based on modified isocyanates with catalyst.

**HYDROGUARD 102** is a 1-component, low viscosity, waterproofing material for injection, based on modified isocyanates.

**HYDROGUARD 103** is a 2-component polyester injection waterproofing system with hardener.

**HYDROGUARD 104** is a material based on polyester with hardener for injection waterproofing.

**HYDROGUARD 105** is a 2-component waterproofing injection material based on polyester polyols with hardener.

**HYDROGUARD 106** is a 2-component injection material for waterproofing, based on polyester polyols + hardener.

**HYDROGUARD 107** is a low viscosity 2-component polyester injection waterproofing system with hardener.

**HYDROGUARD 108** is a 3-component system for injection waterproofing, based on polyesters with hardener and catalyst.

#### Features

- Low viscosity.
- High reaction rate.
- Waterproofing of dry and wet substrates, as well as under water pressure.
- It forms a very strong waterproofing barrier.
- Provides waterproofing of concrete structures.
- Provides durability and improves the quality of structures.
- It strengthens the foundations and creates special strength of proceeded structures (foundations, walls).
- Quickly and easily penetrates into wet structures of any thickness.
- HYDROGUARD materials are used at ambient temperatures from 0°C to +40°C.
- HYDROGUARD materials are operated at temperatures from -35°C to +80°C.

#### Applications

- Protection against water inflow.
- Waterproofing of expansion joints.
- Cracks sealing under high pressure.
- Plugging and strengthening damaged areas.
- Strengthening watered and water-bearing rock
- Remediation of flooded underground structures

#### Application methods

Materials HYDROGUARD 101-108 are used for waterproofing of structures using the injection method.

HYDROGUARD is pumped by a two-component high-pressure pump, in a volume ratio of 1: 1.

After mixing the resin (component A) and hardener (component B), the HYDROGUARD is pumped under pressure through the packer into cracks.

It foams reacting with water, increasing in volume.

In the absence of water, the resin cures without foaming, turning into a dense, non-porous material.

The result is a waterproof membrane.

#### Storage

HYDROGUARD materials are stored in ventilated covered warehouses in airtight containers at temperatures from 0°C to +35°C, protecting against moisture, direct sunlight and freezing.

Guaranteed shelf life in manufacturer's container - 12 months.

Storage over the date specified on the label does not necessarily mean the product is unusable. In case, if store more, please, check the properties of product before use.

#### Packing

- Metal buckets with a capacity of up to 30 liters.
- Canisters with a capacity up to 30 l.

#### Safety instructions

Please see detailed instructions in the relevant product safety data sheet, which can be provided upon request.

## Technical characteristics

Parameter name and measure unit	Standard							
	Hydroguard 101	Hydroguard 102	Hydroguard 103	Hydroguard 104	Hydroguard 105	Hydroguard 106	Hydroguard 107	Hydroguard 108
The density of the base, at (+25,0±0,5)°C, kg/m <sup>3</sup>	1035±20	1125±15	975±15	1010±30	1025±30	1100±30	1025±30	1025±30
The density of the hardener, at (+25,0±0,5)°C, kg/m <sup>3</sup>	-	-	1122±15	1230±30	1230±30	1230±30	1230±30	1230±30
The density of the catalyst, at (+25,0±0,5)°C, kg/m <sup>3</sup>	1015±20	-	-	-	-	-	-	1024±30
The dynamic viscosity of the base, mPa × s*	740±50	270 - 1000	320±50	430±100	310±60	470±50	250±50	250±50
The dynamic viscosity of the hardener, mPa × s*	-	-	60±20	550±100	200±50	500±100	200±50	200±50
The dynamic viscosity of the catalyst, mPa × s*	25±6	-	-	-	-	-	-	245±50
Initial curing time (+15,0±0,5)°C, s, max	-	-	-	-	-	60	-	-
Full curing time at (+15,0±0,5)°C, s, max.	450	-	-	-	-	100	-	-
End of foaming / setting time, s, max**	-	160	-	100	60	-	140	850
Gel time, at (+23,0±0,5)°C, h	-	-	13±1	-	-	-	-	-
Tensile strength, MPa	-	-	0,58±0,12	-	-	-	-	-
Breaking elongation, %	-	-	192±38	-	-	-	-	-
Shore hardness:								
• Method A	-	-	55±3	-	-	80±5	-	-
• Method D	-	-	-	-	80±5	-	80±5	80±5

To obtain more information please contact your nearest representative office of Silkor Ltd.

### LIMITED WARRANTY INFORMATION

#### PLEASE READ CAREFULLY

The information contained herein is accurate, but it does not relieve the customer from the control of each batch of products supplied. Since the conditions and methods of use of our products are beyond our control, the recommendations contained in this document should be updated by the client providing preliminary tests. Recommendations for use should not be construed as a guarantee of product suitability for a particular purpose.

Silkor Ltd only guarantees that the product meets its specifications in effect at the time of delivery.