

PRODUCT**SINSEAL 5-10-15**

Fluid Polyurethane Compound, Fast Reacting with Water, to Form a Closed-Cell Foam.

AVAILABLE PRODUCTS

SINSEAL 5: With water it expands up to 50 times its initial volume creating a flexible foam.

SINSEAL 10: With water it expands up to 15 times its initial volume creating an elastic foam.

SINSEAL 15: High fluidity, it expands up to 40 times its initial volume creating a flexible foam.

USES

Stopping up water leakage by injecting SINSEAL into cracks, splits, couplings, loose stone foundation, or whatever discontinuity in concrete or brickwork: galleries, hydraulic works, sewage systems, basins, etc...

Blocking water from cracked rocks or soil.

Consolidation of soils.

APPLICATION

Two-component product, mixed just before usage, to be injected by manual, piston or similar pumps with working pressure up to 10 bar.

SINSEAL 5 is of general use and thanks to its considerable expansive properties is chosen for stopping up substantial water spills.

SINSEAL 10 thanks to its high elasticity is preferred in all those cases of active cracks or shrinking and expanding discontinuities.

SINSEAL 15 thanks to its high fluidity is preferred for injection into thin cracks, or into ground to produce also a consolidating effect.

The injection holes should be preferably drilled at 45° angle to the cracks.

Experience and particular work conditions may suggest or impose other procedures.

In any way, once drilled the holes must be washed under water pressure in order to remove any rubble left.

The injection nozzles should be preferably of a disposable type, mechanically fixed into the holes. In many cases it is possible to use small copper pipes fixed with fast curing concrete or adhesive epoxy pastes.

For normal or heavy water inrush, a superficial plastering is generally not necessary, thanks to the very fast expansion and consequent hardening of SINSEAL.

For particularly discontinuous and thick sections with poor water inrush, a superficial sealing with fast curing concrete might be necessary.

PARTICULAR REMARKS

SINSEAL are made of an A component (isocyanic prepolymer) and of a B component (accelerator).

The pre-dosed packs contain 10% of B component to 90% of A component ratio is fully acceptable in almost all cases, although it is possible to change the ratio of the B component within certain limits, following the instructions below:

- bigger quantities of accelerator, increase the reaction speed with water.
- smaller quantities of accelerator, reduce the reaction speed with water.

In any way it is suggested not to increase percentage of component B by more than 5-15%.



After mixing the product reacts immediately with water and the ambient humidity. This is the reason why the prepackaged packs should be perfectly protected from water. Left in open air, a thin hardened surface may be originated: this does not compromise in any way the performance and quality of the product underneath for at least 6 hours. The use of forcing pumps is particularly recommended because they prevent the setting of a surface peel. It is recommended to use for mixing and suction lifts anti-adhesive containers and pipes (e.g. polyethylene), in order to easily remove the hardened product. Methylene chlorate is suggested to clean the tools.

SINSEAL, as almost all organic fluids change considerably their viscosity with temperature. The best operative temperatures are those above 15° C, although temperatures as low as 5° C do not compromise in any way the expansion.

Lower temperatures progressively increase viscosity which sometimes make injection difficult.

To operate in cold weather, it is appropriate to dilute the product with 2-3% maximum of MEK solvent or use preferably SINSEAL 15.

TECHNICAL CHARACTERISTICS

COLOUR:

- component A, amber liquid
- component B, non colored/ straw yellow

	SINSEAL 5	SINSEAL 10	SINSEAL 15
Specific Weight at 25° C			
A component	1,14	1,07	1,12
B component	0,980	0,965	0,965
Viscosity at 25° C			
A component	400+- 50 mPa.s	450+- 50 mPa.s	50+- 10 mPa.s
B component	20+- 30 mPa.s	20+- 30 mPa.s	20+- 30 mPa.s
Pot life at 20° C	5 hrs		
Setting time at 20° C			
6% comp. B	90"		
5% comp. B	90"		
10% comp. B	40"-60"		
15% comp. B	10"-20"		
Expansion in open pot			
100 g. comp. A			
10 g. comp. B			
10 g. water	5 liters	1,5 liters	4 liters

Characteristics of the foam: closed cell.

Revised: February 2002

These data supersede all previously published data.

SINIT S.r.l. – Via V. Chiarugi,76 – 45100 ROVIGO (ITALY)

Tel. ++39. 0425 361961(r.a.) – Fax ++39. 0425 410115

E-MAIL sinit@tin.it www.sinitworks.com

