

SOLHYDWELD 2:1

Two component low viscosity epoxy liquid adhesive for pressure injection in concrete

SOLHYDWELD 2:1 is a two component, 100% solids low viscosity epoxy liquid adhesive for pressure injection into concrete structures.

USES

SOLHYDWELD 2:1 is designed for restoring structural integrity to cracked concrete structures.

TYPICAL USES

- For structurally rebonding cracked concrete sections
- For filling porous or honeycombed concrete
- For anchoring bolts, dowels and reinforcing bars
- For filling voids under baseplates and soleplates left from previous grouting

PRODUCT FEATURES

- Excellent penetration of fine cracks
- Fast curing rate
- Excellent adhesion to dry surfaces, woods, metal and concrete
- Tolerates humidity
- Capable of curing at 2°C

SURFACE PREPARATION

The area adjacent to the crack must be cleaned to obtain good adhesion.

SOLHYDBOND THIXO is used to seal the crack and to hold injection devices in place. Use **STRUCTUROC UNDERWATER** for underwater applications. The injection ports may be of the type "T" or sleeves depending on the technique that is used. When using sleeves, it is very important to clean the drill holes.

PRIMING

No primer required.

PRODUCT MIXING

SOLHYDWELD 2:1 may be injected by using a gear or piston type pressure injection machine or using a dual cartridge system.

PRODUCT APPLICATION

After the crack has been prepared for the injection, resin is pumped from one port (or tee) to the next, in sequence. On a vertical crack, one starts at the bottom. If there is water in the crack, it must be expelled by the resin being injected and this phase must continue until water-free resin is emerging from the next port (or tee). The injection process must be continued until the entire crack is filled with the resin mixture.

Test samples of the resin being injected should be taken before and after the injection is complete. It is imperative that the injection process be continuously monitored to ensure that the resin is properly mixed and will cure satisfactorily.

CURING

SOLHYDWELD 2:1 is a self-curing material.

ESTIMATING/YIELD

SOLHYDWELD 2:1 will have a theoretical yield of 60 in³ / liter

Estimation of material required will depend on the type of structure injected.

SOLHYDROC INC. recommends contacting an approved applicator for a more precise evaluation of the quantities required.

MATERIAL PHYSICAL PROPERTIES @ 25°C (77°F)

@ 25°C	COMPONENT A RESIN	COMPONENT B HARDENER	MIXED A+B	PHYSICAL TESTING		
Specific Gravity	1.16	0.98	1.10	Tensile Strength ASTM 638	52 MPa (7,500psi)	
Color	Clear	Ambre	Ambre	Compressive Strength ASTM D695	75 MPa (10,800 psi)	
% of Solids	-	-	100%	Compressive Modulus ASTM D695	1586 MPa (230,000 psi)	
Viscosity	640 cps	190 cps	350 cps	Flexural Strength ASTM D790	82 MPa (11,900 psi)	
CURING				Flexural Modulus ASTM D790	4100 MPa (594,700 psi)	
Pot life 60 g	19 minutes			HDT ASTM D648	54°C (130°F) ASTM	
Dry to the touch	3 hours			Bond to concrete	Breaks in concrete	
Final cure	3 days			Slant shear AASHTO T-237 (1 day)	28 MPa	
Curing time is considerably longer at colder temperatures.				MIXING RATIO	A	B
				Volume	2	1

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■ PRECAUTIONS/RESTRICTIONS

- **SOLHYDWELD 2:1** cures at temperatures as low as 2°C.
- **SOLHYDWELD 2:1** tolerates wet surfaces and can move the water. However it cannot be used where there is hydrostatic pressure, unless special techniques are used. Consult **SOLHYDROC INC.** technical services
- **SOLHYDWELD LOW PRESSURE** is ideal for micro-crack injection

■ PACKAGING

SOLHYDWELD 2:1 is packaged in 15 Liter units (10 L A + 5

L B)

■ RECOMMENDED TOOLS

The following tools will assure a cost effective, satisfactory installation:

- 2:1 ratio gear or piston type pressure injection machine
- Plastic injection tees or ports
- Trowel or putty knife for epoxy paste
- Double cartridge system

■ CLEANING

Consult your **SOLHYDROC** representative for recommended cleaning methods.

■ STORAGE

Store in a dry area. Avoid letting the product freeze.

■ SAFETY

See Material Safety Data Sheet.

SOLHYDROC WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Bulletin when used in accordance with its directions. SOLHYDROC makes NO OTHER WARRANTY either expressed or implied. Buyer assumes all risk in handling.

For Professional Use Only

www.solhydroc.com