

Keminject EP/UW

Epoxy Crack Injection System for Underwater Applications

Description	It is a 100% solvent-free two-components epoxy, ready-to-use, clear epoxy injection for sealing static and life cracks underwater & also at low temperatures (-40 °C). It complies with ASTM C-881, Type II grade I, Class B & C
Where to use	• Chemical plants. • Drainage channels • Ships & Water storm systems • Sewage & waste water tanks • Desalination plants • Dams, Bridges & decks • It can be applied to concrete, metal, and asbestos cement.
Advantages	• Waterproof, hard & glossy. • Non-shrink. • High strength. • Fast drying even underwater. • Chemical resistance & hygienic. • Excellent adhesion. • Not soluble in any type of water.
Properties	
Density	1.25 ±0.05 g/cm ³
Pot life @ 20 °C	12 – 120 min
Curing times 20 °C:	
Touch dry	2 hrs
Full cure	4 hrs
Cure underwater	16 – 24 hrs
Hardness	65 - 70
Tensile strength	20 Mpa
Compressive Strength	38 Mpa
Flexural strength	31 Mpa
Bond strength to concrete	3.5 Mpa
Elongation	45 %
Impact strength	50 cm.Kg
Water absorption	0.2 %
It complies with ASTM D - 2240, 638, 695,C348, 321	

Surface Preparation	• All concrete surfaces must be sound, clean, and dry free from oil, grease & laitance and all loose materials must be removed mechanically. • All steel surfaces must be blasted to SA 2 1/2 and be free from rust and others.
Mixing	Stir each pack thoroughly. Mix (A & B) thoroughly with low speed (300 rpm) until a fully homogeneous mix is obtained. Mixing time (1-2) min.
Application	• Injection packers shall be surface packers or drilled packers depending on the thickness of the substrate, and the nature of cracks (width & length). • The distance between packers is (20-50 cm) along the crack length. • After completing the surface preparation and drilling the injection ports. clean the surface with compressed dry air. • Surface packers should be fixed with (Epoxy adhesive W) and drilled packers are installed and tightened in the drilled ports. • Seal the crack length with a min (50 mm) band with (Epoxy adhesive W), and allow to cure (8 - 12 hrs) before injection. • Inject the product with a suitable pump, commencing from down to up (vertically) and from one side to the adjacent side (Horizontally) until the whole crack is completely injected. • Allow to cure for 24 hrs., remove the packers.
Theoretical coverage	6 L (7.5 kg) seal 20 LM (width 1 mm depth 30 cm)
Packaging	2 Kg units of 2 components (A+B). 5 Kg units of 2 components (A+B). 20 Kg units of 2 components (A+B).
Shelf life & Storage	Keminject EP/UW has a shelf life of 12 months in dry condition.
Cleaning	Clean all tools & equipment immediately after use with Prosolve EP .
Health and Safety	• Some people are sensitive to epoxy resin so gloves and a barrier cream should be used when handling these products. • If contact with the resin occurs, it must be removed before it hardens with soap and water. • Do not use solvents, the use of goggles is recommended but if accidental eye contamination occur, wash thoroughly with plenty of running water and seek medical treatment immediately.
Additional Information	PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure. PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction. PROKEM reserves the right to change the properties of its products. All orders are accepted subject to our current term of sale & delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request. PROKEM extends technical services to include after-sales support to assist users in the proper handling of our products.