

# Keminject EP/UW

Epoxy Crack Injection System for Underwater Applications

<b>Description</b>	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
<b>Where to use</b>	<ul style="list-style-type: none"> <li>• Chemical plants.</li> <li>• Drainage channels</li> <li>• Ships &amp; Water storm systems</li> <li>• Sewage &amp; waste water tanks</li> <li>• Desalination plants</li> <li>• Dams, Bridges &amp; decks</li> <li>• It can be applied to concrete, metal, and asbestos cement.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Waterproof, hard &amp; glossy.</li> <li>• Non-shrink.</li> <li>• High strength.</li> <li>• Fast drying even underwater.</li> <li>• Chemical resistance &amp; hygienic.</li> <li>• Excellent adhesion.</li> <li>• Not soluble in any type of water.</li> </ul>
<b>Properties</b>	
Density	1.25 ±0.05 g/cm <sup>3</sup>
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	<ul style="list-style-type: none"> <li>All concrete surfaces must be sound, clean, and dry free from oil, grease &amp; laitance and all loose materials must be removed mechanically.</li> <li>All steel surfaces must be blasted to SA 2 1/2 and be free from rust and others.</li> </ul>
Mixing	<p>Stir each pack thoroughly.          Mix (A &amp; B) thoroughly with low speed (300 rpm) until a fully homogeneous mix is obtained.          Mixing time (1-2) min.</p>
Application	<ul style="list-style-type: none"> <li>Injection packers shall be surface packers or drilled packers depending on the thickness of the substrate, and the nature of cracks (width &amp; length).</li> <li>The distance between packers is (20-50 cm) along the crack length.</li> <li>After completing the surface preparation and drilling the injection ports. clean the surface with compressed dry air.</li> <li>Surface packers should be fixed with (Epoxy adhesive W) and drilled packers are installed and tightened in the drilled ports.</li> <li>Seal the crack length with a min (50 mm) band with (Epoxy adhesive W), and allow to cure (8 - 12 hrs) before injection.</li> <li>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.</li> <li>Allow to cure for 24 hrs., remove the packers.</li> </ul>
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	<b>Keminject EP/UW</b> has a shelf life of 12 months in dry condition.
Cleaning	Clean all tools & equipment immediately after use with <b>Prosolve EP</b> .
Health and Safety	<ul style="list-style-type: none"> <li>Some people are sensitive to epoxy resin so gloves and a barrier cream should be used when handling these products.</li> <li>If contact with the resin occurs, it must be removed before it hardens with soap and water.</li> <li>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.</li> </ul>
Additional Information	<p><b>PROKEM</b> 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.</p> <p><b>PROKEM</b> designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction.</p> <p><b>PROKEM</b> reserves the right to change the properties of its products.</p> <p>All orders are accepted subject to our current term of sale &amp; delivery.</p> <p>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.</p> <p><b>PROKEM</b> extends technical services to include after-sales support to assist users in the proper handling of our products.</p>