

# TECHNICAL DATA SHEET



**RAKAM**



## 205 - RAK CREETE

Cementitious Waterproof

**RAK Creete** is a two-part cement based product used for water tightness protection of concrete, masonry and most other construction materials.

ADVANTAGES	INSTRUCTIONS FOR USE	APPLICATION																			
<ul style="list-style-type: none"> <li>Water Proof Coating</li> <li>Excellent adhesion to almost all surfaces</li> <li>Non toxic, therefore suitable for contact with potable water</li> <li>Resistant to positive or negative pressures</li> <li>Forms a film which provides an anti-carbonation cover over concrete</li> <li>Resistant to carbon dioxide and chloride ion diffusion</li> </ul>	<p><b>Preparation</b></p> <p>All Surfaces which are to receive the coating, must be free from oil, laitence, grease, wax, dirt or any other form of foreign matter which could affect adhesion. Typically concrete surfaces can be cleaned using high pressure water jet or grit blasting. Predampen the substrate surface with water. High porosity substrates will require more dampening than dense substrates. Any condensation should be removed using a sponge. Any running water should be stopped with RAK Quick Seal.</p>	<p>RAK Creete is supplied in pre-measured containers and should be mixed on site using a clean container. Slowly add the powder to the liquid &amp; mix using a slow speed drill fitted with a suitable paddle. Do not mix more material that can be used within one hour. The appearance of the mixture will be a creamy coat, which can be applied with a brush. Apply the first layer with sufficient thickness to cover the holes, cracks, etc. completely. The approximate consumption<sup>2</sup> will be 1.2 kg/m. Once the first coat is dry, apply second and third coats in order to achieve the required thickness at an average consumption rate of 900 g - 1 kg/m. It is recommended that each coat should be a minimum of 1mm thickness.</p>																			
<p><b>USES</b></p> <ul style="list-style-type: none"> <li>Interior or exterior coating on drinking water reservoirs</li> <li>On almost all types of tanks to provide foundation protection</li> <li>Waterproofing coating for roofs and tunnels</li> <li>Waterproof lining for water retaining structures</li> <li>Water tight areas such as caves, lift holes, and spillways</li> <li>Swimming Pools</li> <li>Waterproofing background mortar for fixing tiles on terraces and swimming pools</li> <li>Waterproofing for general construction</li> </ul>	<p><b>SUPPORTS</b></p> <p>The support must be clean and free of oil, grease, dust and any other unwanted residual materials. The support to be treated should be thoroughly wet prior application.</p>																				
<p><b>TYPICAL PROPERTIES</b></p> <table border="0"> <tr> <td>Density</td> <td>1.8 g/cc</td> </tr> <tr> <td>Toxicity</td> <td>Non-toxic</td> </tr> <tr> <td>Water Penetration</td> <td>7 bars - leakage (2 mm dft) (DIN 1048)</td> </tr> <tr> <td>Elongation %</td> <td>5% (unbounded)</td> </tr> <tr> <td>Water Vapor co-efficient</td> <td>3.64 x 10<sup>-4</sup> cm<sup>2</sup>/s</td> </tr> <tr> <td>Initial Surface absorption</td> <td>95% reduction against control</td> </tr> <tr> <td>CO2 diffusivity</td> <td>R&gt; 357m, SC&gt; 89cm (1mm dft), Se-equivalent concrete thickness</td> </tr> <tr> <td>Chloride ion diffusivity</td> <td>Zero penetration at 90 days</td> </tr> <tr> <td>Chloride ion diffusion co-efficient</td> <td>1.04 x 10<sup>-7</sup> cm/s</td> </tr> <tr> <td>Oxygen diffusion co-efficient</td> <td>D02 7-6 x 10<sup>-6</sup> cm/s</td> </tr> </table>	Density		1.8 g/cc	Toxicity	Non-toxic	Water Penetration	7 bars - leakage (2 mm dft) (DIN 1048)	Elongation %	5% (unbounded)	Water Vapor co-efficient	3.64 x 10 <sup>-4</sup> cm <sup>2</sup> /s	Initial Surface absorption	95% reduction against control	CO2 diffusivity	R> 357m, SC> 89cm (1mm dft), Se-equivalent concrete thickness	Chloride ion diffusivity	Zero penetration at 90 days	Chloride ion diffusion co-efficient	1.04 x 10 <sup>-7</sup> cm/s	Oxygen diffusion co-efficient	D02 7-6 x 10 <sup>-6</sup> cm/s
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	<p><b>SHELF LIFE</b></p> <p>Up to 12 months if stored under 30°C away from direct sunlight</p>	<p><b>HEALTH AND SAFETY</b></p> <p>As with all chemical products, caution should always be exercised. Protective clothing such as gloves and goggles should be worn (see packaging for specific instructions). Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products accidentally swallowed, do not induce vomiting but call for medical assistance immediately. Ensure the container is available for the medical attendant to examine any relevant instructions and contents details. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labeling.</p>																			
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