

# Kemline

## High Strength Resin UV Lining Mortar

### Description

**Kemline** is a rich resin system consists of **Kemline A** and **Kemline B**, it's a high strength lining mortar based on a balanced blend of resin binder with specially graded fillers specifically selected to provide the optimum level of adhesion, abrasion, impact and chemical resistance, accompanied with a special impregnation sealer for final sealing and a UV smooth finish. The perfect balance of **Kemline** is a fast curing allowing surface lining to be carried out on any surface with thixotropic characteristics.

### Where to use

**Kemline** is designed for general application as a lining system, especially for restoring concrete surfaces, metal structures and protection against adverse mechanical and chemical conditions in the following areas:

- Petroleum and petrochemical industries
- Concrete water tunnels and canals
- Marine Industry
- Steel Structure
- Reinforced concrete tanks

### Advantages

#### **Kemline provides the following advantages:**

- Excellent chemical resistance to a wide range of chemicals
- Heavy duty and anti-corrosion
- UV resistance
- Outstanding adhesion on concrete surfaces
- Excellent mechanical properties
- High impact strength and abrasion resistant
- Easy to use, pre-weighed packing
- Provides a complete non permeable surface to repaired area
- Non – shrink
- Low VOC and no fire hazard

### Properties

Color	Grey	
Pot life	30 minutes	At 20 °C
Density	1.73 ± 0.1% Kg/liter	At 20 °C
Curing time	7 Days	At 20 °C
Compressive strength	37 - 40 N/mm <sup>2</sup>	At 20 °C After 7 days
Weight Loss - Abrasion	1598	EN 1504 – 2 2004 At 23 °C
Tensile strength	14 - 16 N/mm <sup>2</sup>	After 7 days
Shear strength	18 - 22 N/mm <sup>2</sup>	After 7 days
Bond strength to concrete	4 - 5 N/mm <sup>2</sup>	At 23 °C
Bond strength to steel	15 - 20 N/mm <sup>2</sup>	At 20 °C
Linear shrinkage	0.07 %	At 23 °C
Water vapor permeability	45 m	Class II
Capillary absorption	0.013 Kg/m <sup>2</sup> .05h	EN 1504 – 2 – 2004
Coefficient of thermal expansion	24.11 × 10 <sup>-6</sup>	At 23 °C

Surface Preparation	<p>All surfaces must be clean, free from oils, standing water, grease rust, scale and all loose particles and concrete must be at least three weeks' old.</p> <p>All surfaces to be treated must be mechanically roughened – sandblasting, shot blasting, or waterjet are recommended methods so cement laitance is removed and mechanical bond is enhanced.</p> <p>Surface moisture must not exceed 5%.</p> <p>Metal surfaces (steel and iron) should be free from scale, rust, oil and grease.</p> <p><b>Expansion Joints:</b></p> <p>Shall be installed in accordance with local building codes.</p> <p>Never bridge an expansion nor construction joint.</p>
Mixing	<p>For both <b>Kemline A</b> and <b>Kemline B</b> the hardener (part B) should first be poured into the base container (part A) and drained well.</p> <p>The two components should be thoroughly mixed, preferably with mechanical stirrer, e.g. an electrical drill with stripper attachment until a uniform clear liquid is obtained.</p> <p>Thinner shall not be added to any lining or coating component unless required by <b>PROKEM</b> instructions.</p>
Application	<ul style="list-style-type: none"> <li>The mixed <b>Kemline A</b> should firstly be applied by spatula or trowel to the prepared surface with the material being pressed firmly onto the surface then finished by float to give a smooth surface as possible</li> <li>Apply <b>Kemline B</b> within 12 - 24 hours with a spray gun, airless, or a short haired roller</li> <li>A light abrading is required when time interval is exceeded</li> </ul>
Cleaning	All tools and equipment should be cleaned immediately after use with <b>PROKEM</b> solvent
Theoretical coverage	<p><b>Kemline A:</b> 1.7 - 2 Kg/m<sup>2</sup> /1mm thickness</p> <p><b>Kemline B:</b> 0.1 – 0.2 Kg/m<sup>2</sup></p>
Packaging	<p><b>Kemline A</b> 20 Kg can A + B</p> <p><b>Kemline B</b> 20 Kg pails A + B</p>
Shelf life & Storage	Kemline has a shelf life of 6 months in dry storage conditions
Precaution	<ul style="list-style-type: none"> <li>Mixed resins will develop temperature during their curing period. This could result in heat generation and possible smoking if the material is unused and kept in bulk.</li> <li>Care should be taken to use all mixed materials within the stated pot life or provide a well-ventilated place away from other materials until any exothermic reaction has taken place and the product can be disposed of properly</li> </ul>
Health and Safety	<ul style="list-style-type: none"> <li>Cleanliness in handling the resins is essential in order to prevent skin irritation.</li> <li>Some people are sensitive to resins 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 a resin removing cream following by washing with the soap and water. Do not use solvent.</li> <li>The use of goggles is recommended but should accidental eye contamination occur wash thoroughly with plenty of 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 a proper handling of our products</p>