

Kemcoat Novolac

Solvent –Free Superior Chemical Resistant Epoxy Resin Coating

Description	Kemcoat Novolac is a solvent free 2 components Epoxy Novolac coating, for an extremely high strength exceptional chemical resistance, heat resistance up to 100 °C epoxy coating for steel and concrete	
Where to use	A unique epoxy system for: • Dairies, food processing, soft drinks factories • Hospitals, pharmaceutical industry • Heavy engineering plant workshops, oil refineries and acid storage tanks	
Advantages	• Solvent-free, no fire risk • Excellent adhesion to concrete, mortar and steel substrate • Non corrosive • Excellent resistance to thermal shocks • High mechanical strengths • High resistance to abrasion • High chemical resistance	
Properties		
Color	Transparent, white & Grey	
Solids by volume	100 %	
Specific gravity	1.55 ±0.2 Transparent 1.6 ±0.2 Colored	
Chemical Resistance	Refer to PROKEM chemical resistance tables	
Compressive strength	30 – 35 N/mm² @ 23 °C/after 7 days	ASTM C579
Bond strength	> 1.5 N/mm² @ 23 °C/after 7 days	ASTM D7234
Abrasion resistance	90 mg @ 23 °C/after 7 days	ASTM D4060 (CS 17/1000/1000)
Hardness shore D	77 – 80 @ 23 °C/after 7 days	
Impact	2.5 N.m @ 23 °C/after 7 days	
Tensile strength	7 N/mm² @ 23 °C/after 7 days	
Temperature resistance	Up to +100 °C	
Pot life @ 23 °C	45 minutes (reduced at higher temperatures)	
Initial hardening	24 Hours	
Fully cured	7 Days	

It complies with ASTM D543,1308, LEED NC-2016, IEQC 4.2, LEM

Surface Preparation	New poured concrete:	
	• Allow to fully cure 28 days prior to application • Remove any curing membrane by sanding or etching with a strong detergent	
	Old concrete:	
	• Thoroughly clean the surface with a grease -cutting detergent to remove grease and oils, and remove any loose or unsound concrete by chipping, scarifying, shot blasting, sanding, or grinding	
	Previously coated concrete:	
Surface Preparation	• Remove any peeling or degraded paint by sanding or using a paint stripper • For intact paint, thoroughly clean the surface with a strong detergent, then lightly sand to remove any gloss • Treat any areas worn down to the original concrete as bare concrete • All damaged areas, cracks and surface irregularities must be repaired and smoothed first by using Kemrepair EP and bonding layer using Kembond EP	
	Steel surface:	
	• The steel surface should be blasted to Sa 2 ½ surface quality to remove rust and mill scale, or any other efficient method and ensure that all traces of rust are removed • Please refer to PROKEM technical office for further details on surface preparation and application procedure	

Expansion Joints	• Shall be installed in accordance with local building codes • Never bridge an expansion, contraction or construction joint
Mixing	• Stir the contents of part A with an electrical stirrer to disperse any settlement • Add part B to part A and mix for 2 - 3 minutes with a low-speed drill until a homogeneous and uniformly moist mix is obtained
Application	• Concrete surfaces can be primed with Sealer E115 or Sealer E43 – Wetseal for green concrete) and leave to dry overnight • Metal surfaces can be primed with Kemprim M or Kemprim ZP • Spread the coat to an even, smooth finish free from marks • Allow the coat to cure overnight before recoating • Allow to cure for 7 days before use
Cleaning	Cleaning all tools and equipment immediately after use with PROKEM special solvent
Theoretical coverage	1st step: • Epoxy Primer and bonding use as a primer coat 0.2 – 0.3 Kg /m² (depending on substrate condition) 2nd step: • Kemcoat Novolac (A+B) @ 0.23 – 0.27 Kg/m² for 150 - 170-micron D.F.T / coat
Packaging	Part (A+B) : 5 & 20 Kg Pails
Shelf life & Storage	Kemcoat Novolac has a shelf life of 12 months if kept in their original packing in a dry condition
Health and Safety	• Use gloves and a breathing mask when applying • Apply forced ventilation in confined spaces • Skin splashes to be removed with hand cleanser, soap and water • Eye splashes to be removed with plenty of water • If ingested seek medical advice
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