

Kemgrip EP

Thixotropic Three Components Solvent – Free Epoxy Resin Anchoring

Description	Kemgrip EP is a solvent-free, three-components, epoxy-based mortar that produces high-performance strength and chemical resistance. Kemgrip EP is scientifically formulated to fix rebars and bolts into drilled or cast holes in concrete, with remarkable vibration and impact resistance, a high pull and loading forces. Standards: ASTM C-881: Type IV, Grade 3 Classes B, C.
Where to use	• High strength corrosion resistance anchoring of bolts and bars from 12 - 51 mm. diameter into concrete, rock, masonry, or brickwork where high speed of installation and early application of load is required. • Permanent installation of reinforcement starter bars, foundation bolts, base plates, balustrades, barriers and safety fences, railway tracks, tie-back, anchors, reinforcement doweling abutments, ground anchors for tower cranes, and dock sills. • Emergency repairs of concrete where fast strength gain is required.
Advantages	• Rapid strength gains. • Vibration resistant. • Corrosion resistant. • Economic. • Can be-placed underwater (Special Grade). • Non-sag in vertical and overhead applications. • High creep resistance under permanent load. • Shrinkage free-curing.
Properties	Compressive Strength: After the minimum time before loading the grout typically attains a compressive strength in excess of 20 N/mm² and an ultimate compressive strength of 90 N/mm². Chemical Resistance: The cured resin is resistant to fresh and salt water, petrol oils, grease, and most acids, alkalies, and solvents.
Bond strength to concrete at 23 °C.	4 - 5 N/mm ²
Bond strength to steel @ 20 °C.	15 - 20 N/mm ²
Shear Strength	23 N/mm ²
Specific Gravity @ 23 °C.	1.95 ±0.1
Tensile Strength	20 N/mm ²
Final Cure	7 Days
Temp °C	23
Gel time in min	60
Minimum time before load in hours	24

How to use	- The optimum performance of Kemgrip EP grouts requires rough surfaces, dust free holes. The use of rotary drills with air is-recommended. - Diamond drilled holes should be under-reamed unless necessary safety factors are incorporated. - Cast holes should preferably be inverse dovetail configuration. - If parallel-sided holes are cast, they should be rough to provide adequate keying. - Clean out the hole and brush with a bristle brush. - Blow out the remaining dust from the bottom of the hole and ensure that the surface is clean and dry. Bar preparation: All bars should preferably be degreased and all flaky rust should be removed.
Mixing	- A complete pack of binder (resin and hardener) and selected filler should be mixed in one operation. Mixing may be carried out manually or mechanically. - When a smooth, even consistency is-achieved the grout is ready for use and should be placed well within the gel time of the grout. - Packs have-been designed to produce practical and economic volumes of grout. Do not attempt to mix partial components.
Application	- The grout should be poured steadily into the prepared holes. - The anchor bar is then pressed into the hole to the required depth. - Slight agitation of the bar will assist in achieving a complete bond. - The bar should be then left undisturbed in the required position until the resin is set. Condition during application: At operating temperature above 40 °C, the creep of Kemgrip EP resin under load may become significant. Resin anchors should not be used where structural load bearing performance has to be maintained in anchors subjected to fire conditions. Cleaning: Any mixing drums, pumps, etc. should be-cleaned using PROKEM special solvent within the pot life of the grout.
Theoretical coverage	1.95 Kg/m ² / mm
Packaging	The standard pack consists of a can of resin and hardener a plastic bag of Pre-graded filler. 5 kg & 20 Kg pails (3 components) A, B, C
Shelf life & Storage	Kemgrip EP has a shelf life of 12 months at 20 °C Kemgrip EP should be stored away from high temperatures.
Precaution	- Dampen surface immediately ahead of application - Care should be taken when curing in hot, sunny or windy conditions. - Do not apply when the temperature is 5 °C or due to fall below 5 °C within 24 hours.
Health and Safety	- Confined area must be well ventilated and no naked flame allowed. Contact with the skin should be avoided as certain sensitive skins may be attached by contact with the resin occurs, the skin should be washed immediately with soap and water-not solvent. - Use goggles- gloves and a breathing mask when applying. - Eye splashes are to be-washed 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.