KingCoat ® PE500

Two component high build coal tar epoxy resin coating.

DESCRIPTION

KingCoat PE500 is a two component high build polyamide coal tar epoxy. The product has excellent chemical resistance properties which makes it particularly suitable for sewage treatment plants and for aggressive environments. KingCoat PE500 is suitable for use on concrete and steel surfaces.

APPLICATIONS

KingCoat PE500 is designed for use in applications such as:

- Sewage treatment plants.
- Chemical processing.
- Protection of concrete and steel structures submerged in sea water or exposed to tidal or splash zones.
- Lining of manholes, pipes, jetties, piers, ducting and foundations waterproofing.

ADVANTAGES

- Excellent adhesion to concrete and steel surfaces.
- Cost effective; does not require primer.
- Suitable for use as a waterproof coating.
- High chemical resistance.
- Does not support bacterial growth.
- High abrasion resistance.
- Can be applied to green concrete.
- Can be applied at 500 micron thickness per coat.

METHOD OF USE

Substrate Preparation

Concrete surfaces:

The Substrate should be sound, clean and free from contamination. Surface Laitance should be removed by grit blasting or water jetting. All exposed blow holes should be filled with epoxy paste using KingRep EP10.

Steel surfaces:

All surfaces should be grit blasted to reach a bright finish meeting the requirement of Swedish Standard SA 2 1/2.

TECHNICAL PROPERTIES

Specific gravity:	1.0 @ 20ºC

KingCoat ® PE500

Solid content:	97%
Colour:	Black
Water absorption: ASTM D570	< 0.1%
Bond strength: ASTM D4541	≥ 1.5 MPa
Pot life:	2 - 3 hr @ 25°C 1 - 2 hr @ 35°C
Re-coatable time:	12 hr @ 25°C 8 hr @ 35°C
Full cure:	After 7 days @ 25°C
VOC: ASTM D2369	< 30 g/ltr Complying with LEED requirements
Application temperature:	5 - 40°C
Service temperature:	-10 - 55°C

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. Stir the content of each component separately to disperse any settlement. Add the entire content of the hardener to the base and mix for 3 minutes and until uniform colour and consistency are achieved.

APPLICATION

KingCoat PE500 can be applied by brush and roller. The first coat should be applied to obtain a continuous uniform coating. The second coat should be applied within the over coating time to achieve the maximum adhesion between the two coats.

CLEANING

All tools should be cleaned immediately after application using KINGKRETE Solvent. Hardened materials must be cleaned mechanically.

PACKAGING

KingCoat PE500 is available in 18 kg packs.

COVERAGE

Approximately 0.5 kg/m²/coat.
Two coats should be applied to achieve 1 mm dry film thickness.

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative. KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

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Chemical Resistance after full cure ASTM D1308 (after 7 days immersion in the below chemicals)	
Organic Acids	
Lactic Acid 10%	R
Oleic Acid sat.	R
Citric Acid 25%	R
Vinegar 10%	R
Inorganic Bases	
Sodium Hydroxide 50%	R
Ammonia Solution 10%	R
Potassium Hydroxide 50%	R
Aqueous Solutions	
Sodium Chloride sat	R
Tap water	R
Chlorinated water	R
Dead sea water	R
Solvents	
White spirit	R
Xylene	R
Toluene	R
Oils & Fuels	
Benzyl alcohol	R
Brake fluid	R

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Engine oil	R
Diesel	R
Kerosene	R
Detergents & Soaps	R
Inorganic Acids	
Sulphuric Acid 25%	R
Phosphoric Acid 20%	R
Hydrochloric Acid 10%	R
Nitric Acid 10%	R

R: Resistant
RS: Resistant with slight discoloration
SS: Slight softining

KK-SAS-04.2-CT-PE500-R3-2601

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.

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