KingCoat ® PE300

Two component solvent based coal tar epoxy resin coating system.

DESCRIPTION

KingCoat PE300 is a two component amine cured coal tar epoxy. The product has excellent chemical resistance properties which makes it particularly suitable for sewage treatment plants and for aggressive environments. KIngCoat is suitable for use on concrete and steel surfaces.

APPLICATIONS

KingCoat PE300 is designed for use in applications such as:

Sewage treatment plants.

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 350 micron thickness per coat.

STANDARDS

KingCoat PE300 complies with:

- The chemical resistance requirements when tested in accordance with ASTM D1308.
- BS 5493 reference to KF3 B (Two-pack chemical- resistant finishes, modified epoxy coal tar).

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 blow holes should be filled with epoxy paste such as 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

Colour:	Black
Mixed density:	1.50 ± 0.05 g/cm³
Solid content:	94 ± 2%
Volume solid:	90 ± 2%
Pot life:	3 - 4 hr @ 25°C 1 - 2 hr @ 35°C
Full cure:	After 7 days @ 25°C
Over- coating time:	1 day @ 25°C
Tensile strength: ASTM D412	> 2.0 MPa @ 7 days
Water absorption: ASTM D570	< 0.08%
Service temperature:	−10 to 55^0 C
VOC: ASTM D2369	< 110 g/ltr

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 PE300 can be applied by brush, roller or airless spray machine. 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 coats.

Notes:

- *The area where KingCoat PE300 is going to be applied must be well ventilated for at least 24 hours, and must not have high relative humidity or any presence of running water.*
- *KingCoat PE300 must not be applied over other coats, but only over itself within the recoatable time.*
- *Application of KingCoat PE300 should not be done at low temperatures (below 8ºC).*
- *KingCoat PE300 especially when the coat is still not fully cured, (7 days). However, this colour change does not affect the performance of the coating.*

CLEANING

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

KingCoat® PE300

PACKAGING

KingCoat PE300 is available in 25 kg packs.

COVERAGE

0.54 kg/m²/coat.
Two coats should be applied to achieve 700 microns 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 Qatar facility are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

Chemical Resistance after full cure ASTM D1308 (after 7 days immersion in the below chemicals)	
Organic Acids	
Oleic Acid sat.	R
Vinegar 10%	SS
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	SS
Brake fluid	R
Engine oil	R
Diesel	R
Kerosene	R
Detergents & Soaps	R
Inorganic Acids	
Sulphuric Acid 40%	R
Nitric Acid 10%	R

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

* Properties listed are based on laboratory-controlled tests.
® = Registered trademark of the KingKrete-Group in many countries.

KingKrete-Qatar/KingCoat_PE300_02/v2/07_18

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