

KingCoat® HD500

Two-component, low-solvent, heavy-duty epoxy protective coating for steel and concrete.

DESCRIPTION

KingCoat HD500 is a resistant, two-component, low-solvent epoxy coating with mineral fillers. After full cure it forms a tough, hard and heavy-duty protective coating for concrete and steel, and is suitable for buried and submerged structures, hydraulic-engineering constructions and the internal lining of tanks and reservoirs, such as those used in sewage treatment and the agricultural and chemical industries. It is also suitable where application onto damp concrete is unavoidable.

APPLICATIONS

- ▣ Protective coating for concrete and steel
- ▣ Buried and submerged structures
- ▣ Hydraulic-engineering constructions
- ▣ Internal lining of tanks and reservoirs (sewage treatment, agricultural and chemical industries)
- ▣ Surfaces where application onto damp concrete is inevitable

KingCoat HD500 is not suitable for surfaces in contact with drinking water and must be applied only by experienced professionals.

ADVANTAGES

- ▣ Tough, hard and heavy-duty
- ▣ Abrasion and impact resistant
- ▣ Resistant to water and to a wide range of chemicals
- ▣ Low solvent content
- ▣ Can be applied onto damp concrete

CHEMICAL RESISTANCE

KingCoat HD500 is resistant to fresh water, process water, brackish water, seawater, domestic sewage, dilute inorganic acids and alkalis, neutral salts, mineral and fuel oils, grease and detergents. Industrial wastewater resistance is available on request, based on wastewater analysis. It is not resistant to benzene-hydrocarbons and tar oil.

TECHNICAL PROPERTIES

Appearance / colour	Black, tinted red
Density	≈ 1.9 kg/ltr
Solid content	≈ 75% by volume; ≈ 88% by weight
Mixing ratio (A : B)	93 : 7 by weight (100 : 14 by volume)
Pot life	≈ 90 min @ 20°C; ≈ 45 min @ 30°C
Consumption	0.38 kg/m ² at 150 µm DFT
Coverage	2.63 m ² /kg
Thermal resistance	Dry heat to ≈ 100°C; warm water to ≈ 60°C
Minimum product / surface temperature	10°C
Maximum relative humidity	85%
Drying time (20°C)	Touch-dry ≈ 4 hr; handle-dry ≈ 12 hr
Full cure (20°C)	≈ 7 days

METHOD OF USE

Surface Preparation

Concrete must be solid with a gripping surface, free of cement laitance, dust, loose and friable particles and other contamination, with a moisture content not exceeding 6%. Sweep blasting increases adhesion and is particularly important for underwater exposure. Steel must be prepared to the appropriate cleanliness standard before coating.

Mixing

Stir component A thoroughly with an electric mixer (starting slowly, then increasing to approximately 300 rpm). Add component B carefully and mix both components thoroughly, including the sides and bottom of the container, for at least 3 minutes until homogeneous. Transfer the mixed material to a clean container and mix again briefly.

Application

Airless spray gives the best results and readily achieves the specified dry film thickness (efficient equipment, minimum pressure 180 bar, nozzle ≥ 0.38 mm, material temperature minimum 15°C). Where applied by roller or brush, additional coats may be required to reach the specified thickness. On concrete, apply 2 – 3 coats, thinning the first coat with a maximum of 5% of a suitable KingKrete epoxy thinner and applying subsequent coats

KingCoat® HD500

Two-component, low-solvent, heavy-duty epoxy protective coating for steel and concrete.

unthinned. On steel, apply 2 – 3 coats, preferably in alternating shades to indicate wear and the need for re-application.

Cleaning

Clean all tools with a suitable KingKrete epoxy thinner immediately after use. Cured material can only be removed mechanically.

PACKAGING

KingCoat HD500 is available in 35 kg and 15 kg units.

STORAGE

KingCoat HD500 has a shelf life of 24 months in originally sealed containers when stored in cool, dry conditions out of direct sunlight.

HEALTH AND SAFETY

Apply in well-ventilated areas and wear suitable eye, skin and respiratory protection. Do not smoke or apply near naked flames. Avoid contact with the eyes and skin. For further information, refer to the Safety Data Sheet.

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 Middle East facility are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, ISO 14001 and ISO 45001.

* Properties listed are based on laboratory-controlled tests.

® = Registered trademark of the KingKrete-Group in many countries.

Ref: KK-06037-MEA-R01 | Issue: 01.2026

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.