

UltraTop 1404 EP

Three component solvent free high build epoxy floor coating

PACKAGING AND COLORS

UltraTop 1404 EP is supplied as a 32kg (20 L) multi component pack (including colour pack).

Available in a range of standard colours: Other colours can be produced depending upon the quantity and in consultation with Gulf Additive Factory Technical Services Department.

COVERAGE AND YIELD Smooth Finish

20 L pack of UltraTop 1404 EP covers 100 m² at a dft of 200 microns (2 coats required), i.e. $0.2 L/m^2/coat$

Slip Resistant Finish

20 L pack of UltraTop 1404 EP covers 80 m^2 at a dft of 250 microns (2 coats required), i.e. $0.25 \ L/m^2/coat$

UltraTop SR 3 approx. 0.6-1.0 kg/m².

Above coverages do not allow for any wastage and coverages may vary depending on the porosity and profile of the concrete substrate.

STORAGE AND SHELFLIFE

Store out of direct sunlight, clear of the ground and on pallets. Protect from rainfall. Avoid excessive compaction and protect from extremes of temperature. The shelf life is 12 months when stored as above.

DESCRIPTION

UltraTop 1404 EP is a high performance, solvent free, high chemical resistant epoxy resin coating system designed to offer seamless durable floor protection system at applied thicknesses between 0.2-0.4mm.

With the addition of UltraTop SR 3 aggregates between coats, anti-slip resistant applications can be achieved in system build-up thicknesses between 0.5-1.0mm

TYPICAL APPLICATIONS

UltraTop 1404 EP may be used as a hard-wearing coloured floor coating in areas such as processing, manufacturing, commercial and warehouses to provide a surface coating with a high gloss hygienic finish or a slip resistant coating system.

UltraTop 1404 EP can be used extensively in but is not limited to the following areas of application:

- Vehicle movement areas.
- Aircraft hangar areas.
- Food and beverage production areas.
- Commercial and domestic floors.
- Factory and warehouse flooring
- Chemical manufacturing plants.
- Pharmaceutical and other medical facilities.
- Car production and showroom facilities.

ADVANTAGES

- Seamless flooring system which is easy to maintain with a hygienic finish.
- Non-dusting and Solvent free.
- Provides impermeable protection against common oils, greases, lubricants, aviation fuels and hydraulic oils such as Skydrol
- Abrasion and wear resistance
- Excellent chemical resistance
- Easy application by brush, roller or squeegee
- Slip resistant finish in trafficable applications



TYPICAL PROPERTIES

Laboratory tests carried out at 25°C	
Pot life	Approx. 35 mins
Initial cure	24 h
Max. overcoating time	36 h
Final cure	7 days
Full chemical resistance	7 days
Mixed density	Approx. 1.6 kg/L
Solid Content	≥99%
Max service temperature	60°C
Tensile strength ASTM C638	20 N/mm ²
Bond strength BS EN 1015 - Part 12	>1.5 N/mm²

APPLICATION GUIDELINES

Concrete substrates must have a minimum compressive strength of 20 to 25 MPa, a minimum tensile pull-off strength of 1.5 MPa and be free of oil, fat, grease, dust, and loose friable materials. The substrate should be free from rising damp or ground water pressure.

Remove all surface laitance, oil, grease, or any defective concrete that will reduce the bond of the UltraTop 1404 EP.

The surface to which the UltraTop 1404 EP is to be applied must be flat.

Surface irregularities must be ground down or filled out with UltraRep EP 20 or repair materials from UltraRep range.

A light etch giving the profile of medium grit sandpaper is the ideal surface for the application of UltraTop EP, this can be achieved by light grit blasting, captive blasting or surface grinding.

After all preparation has been completed, ensure dust is removed from the surface. This is best achieved using an industrial vacuum.

PRIMING / SEALING

UltraTop 1404 EP does not require a priming coat when applied to good quality dense concrete.

MIXING

Add the entire contents of the UltraTop 1404 EP PTA and PTB and UltraTop Col Pack and mix the three components for 2 minutes using a slow speed drill (300-400 rpm) fitted with a spiral mixing paddle until all striations have disappeared and a uniform colour is obtained.

PLACING / APPLICATION

UltraTop 1404 EP is a versatile product and can be applied in various application thicknesses from 200 microns to 250 microns per coat giving DFT thickness of 0.4-0.5mm when applied as a two-coat system.

To achieve a smooth finish at an application rate of 200 microns per coat use a medium pile roller or suitable paint brush.

For slip resistant finishes, apply the base coat first. This coat can then be scattered with UltraTop SR 3 aggregate by completely blinding at approximately 0.6-1.0 kg/m². Apply aggregate to wet base coat. After initial cure (12 hours at 40°C) the excess aggregate should be removed by brushing or vacuuming.

The top coat can now be applied. Depending on the surface profile, type and density of the UltraTop SR 3 used, the top coat may consume more material than the base coat to achieve a fully sealed surface. The top coat must be applied within the maximum over coating time period i.e. 36 hours at 25°C or 24 hours at 40°C.

Prior to application, UltraTop 1404 EP should be stored undercover and protected from extremes of temperature in an air-conditioned environment immediately prior to application.

Note: In cold weather or when the ambient temperature is below 25°C, warm the resin and hardener with heat lamps or keep them in a heated environment before use.

EXPANSION JOINTS

Expansion joints in the existing substrate floor must continue through the UltraTop 1404 EP coating. Contact your Gulf Additive Factory representative for advice on Gulf Additive Factory sealants.

CHEMICAL RESISTANCE

Fully cured UltraTop 1404 EP samples have been tested for chemical resistance to the following chemicals for 7 days @ 25°C:



Lactic Acid 10%	Resistant
Citric Acid 10%	Resistant
Acetic Acid 10%	Limited Resistance
	(colour change)
Hydrochloric Acid 18%	Resistant
Sulphuric Acid 50%	Limited Resistance
	(colour change)
Nitric Acid 20%	Resistant
Sodium Hydroxide 50%	Resistant
Ammonia 10%	Resistant
Petrol	Resistant
Saturated Sugar Solution	Resistant

CLEANING

Remove uncured UltraTop 1404 EP from tools and equipment using a suitable thinner (Xylene / MEK / Acetone). If UltraTop 1404 EP has cured, then it can only be removed by mechanical means.

HEALTH & SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which could be tainted during the curing/ drying phase of the product). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal the containers after use.

QUALITY AND CARE

All products originating from Gulf Additive Factory, Qatar facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

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