

Designed and Formulated in Australia by APC

DESCRIPTION

EPO100FCT® is formulated with a blend of higher performance resins which imparts a unique combination of desirable properties to the coatings derived from them such as rapid cure, even at low temperatures down to 5°C with a workable pot life and have the ability to resist moisture while curing, making it ideal for cold and damp conditions or on green concrete.

Due to its yellowing nature use only as a Primer or Base coat.

RECOMMENDED USES

- Maintenance & Marine Coatings
- Containers & Tanks
- Pipe & Bridge Coatings
- Primers for steel & concrete
- Automotive aftermarket
- Floorings
- Electrical Castings

For use on mineral-based and metal substrate such as:

- Mild, Stainless & Aluminium steels when mechanically abraded.
- Concrete
- Mortar
- Stone
- Epoxy modified mortars

FEATURES AND BENEFITS

- Excellent chemical resistance
- Excellent adhesion to wet & dry substrates
- High mechanical properties
- Moisture tolerant during cure
- Non-critical mix ratio
- Waterproof
- Food Contact Safe

PHYSICAL PROPERTIES

Rate of Burning:	ASTM D635 Self-extinguishing
Compressive Strength:	ASTM D695 12,000 psi
Tensile Strength:	ASTM D638 3,900 psi
Elongation at Break:	ASTM D638 7.00%
CS-17 wheel, 1 kg load:	ASTM D4060 0.10gm loss
Water Absorption:	D570 0/07% (2-hour boil)
Flexural Strength:	ASTM D790 7,800 psi
Shore D Hardness:	ASTM D2240 89
Heat Distortion Temperature:	ASTM D649 50 Deg.C
Bond Strength to Concrete:	100% Concrete failure
Freezer Temperature	Up to -40 deg. C

PHYSICAL PROPERTIES CONT'D

RESISTANCE TO CHEMICAL SPILLS (7 days at 25deg.C):

Ammonia Solution (20%)	Sodium Hydroxide (30%)
Sulphuric Acid (30%)	Kerosene
Lactic Acid (5%)	Aviation Fuels
Sodium Chloride (50%)	Petrol
Tannic Acid	Hydrochloric Acid (20%)
Acetic Acid (5%)	Toluene

SURFACE PREPERATION

Surfaces must be clean, dry and free from all traces of loose material, old coatings, curing compounds, release agents, laitance, oil and greases etc. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa and with moisture content below 4%.

Structurally unsound layers and surface contaminants must be removed. Substrates heavily impregnated with oil must be cleaned via suitable solvent cleaning methods. To check that all traces of oil have been completely removed, sprinkle a few drops of water over the surface. If all water is quickly absorbed, the surface is sufficiently oil and grease free. If water forms into globules that remain on the surface, further thorough treatment of the substrate is necessary.

When used as a self-levelling floor topping it will not profile irregular substrates. For profiling defects on horizontal surfaces a suitable patching mortar is required. The patching mortar can be of epoxy or cementitious base depending on the scope, particular conditions and requirements of the work.

MIXING

Mix Part 'A' thoroughly using a power drill with paint mixing attachment.

Mix 3 parts resin 'A' with 1 part hardener 'B' thoroughly using a power drill with a paint mixing attachment for 2 minutes. Ensure that all the material on the sides and on the mixer, is incorporated. Take care to avoid air entrapment in the mix.

APPLICATION

First thoroughly stir the epoxy base to redistribute the pigment. If using more than one kit, compare the epoxy base (Part A) for colour matching. Base colours may vary slightly between different batches. If the colours are noticeably different, mix all the epoxy base containers together to obtain a uniform colour before mixing with the curing agent.

Mix EPO100FCT® Coating Kit epoxy base (Part A) with the EPO100FCT® Coating Kit curing agent (Part B). Use a mechanical mixer to ensure thorough mixing. The mixing ratio is 3/1 (base/curing agent) by volume. Make sure that both components are thoroughly mixed along sides and bottom of container. Unmixed components will result in 'hot spots' that will never cure. EPO100FCT® Coating Kit does not require a 'sweat-in' or induction time and the mixed components should be used immediately.

We recommend thinning the first coat with up to 20% Epoxy Thinners to ensure high penetration and adhesion, subsequent coats can be thinned but sufficient curing time is needed to release thinner out of coating 12hrs at 20deg. Second coat up to 10% Epoxy Thinners.

Apply using a brush, or roller. Use a lint free epoxy roller to apply the product.

If recoating after 72 hours a light sand will be required to ensure inter coat adhesion.

Note: Exposure to sunlight and UV radiation can result in discolouration and slight chalking. This will have no adverse effect on the protective function of the coating.



COVERAGE

4 – 6 M2 per litre depending on method of application and porosity of the surface.

Normally 2 coats are required, film thickness will be approximately 300 microns per coat.

RETURN TO SERVICE

Light foot traffic 24 hours after completion of the job. Vehicle 24-48 hours. Sure hardness 72 hours. Full Chemical Cure 7 Days

SHELF LIFE

2 Years, keep in a cool dry area out of direct sunlight.

POT LIFE

Depending on the temperature 30 – 45 minutes.

WARNING – ENVIRONMENTAL CONDITIONS

Temperature and the surrounding atmospheric conditions will play a part in the curing process of all epoxy products. Under conditions of low temperatures and high humidity the final cured surface finish can be adversely affected potentially resulting in poor gloss retention, discolouration over time, poor overcoatability and intercoat adhesion. Quite often these conditions will result in the formation of a white film over the surface often evident after contact with water. This chemical reaction with the atmosphere is commonly referred to as “amine bloom” or “amine blush”.

If this occurs then the existing coating will need to be abraded to completely remove the affected surface to ensure the adhesion of subsequent applications. In some cases, partial or complete re-priming may be necessary.

Attention also needs to be paid to the substrate temperature which should be at least 5°C and preferably 5°C above the dew point during the curing phase. Recommended 90% Humidity Max.

Industry standards recommend the accurate recording of times and dates, batch numbers, consumption rates and environmental conditions including substrate and air temperatures, humidity levels and dew point readings during both the application and curing processes. Full material warranties cannot be provided unless all the relevant data has been recorded accurately.

IMPORTANT NOTICE: Read the SDS and TDS carefully prior to the use of any product. Application, performance & safety data may change from time to time. In emergency, contact the Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice. **IF THE SITUATION IS LIFE THREATENING, DIAL 000.**

PRODUCT DISCLAIMER: Read the SDS & TDS carefully before use of any product. These documents contain information in context to how you will apply the product, including if it is being used in conjunction with any other products, the type of surfaces and the manner in which the product will be applied. All Purpose Coatings Pty Ltd does not accept any liability either directly or indirectly for any losses that arise from the use or application of the product in accordance with any advice, specification, recommendation or information given by All Purpose Coatings Pty Ltd.