

Designed and Formulated in Australia by APC

DESCRIPTION

This Industrial Floor epoxy is a 100% solids, two-pack cycloaliphatic amine cured epoxy resin. Epoxy flooring resin designed as a stand-alone topcoat and as a binder for non-skid surfaces. It is non-blushing and non-water spotting, high gloss and self-levelling.

Designed for use in a wide range of commercial environments where a lasting solution to floor maintenance problems is required. The exceptional resistance to a wide variety of chemical spillage and fumes makes this product ideal for use in high traffic commercial environments.

RECOMMENDED USES

ROLL COAT SYSTEMS:

- Mechanical Workshops
- Factories
- Warehouses
- Food processing industry
- Chemical/pharmaceutical industry
- Power stations
- Plastics industry
- Laboratories
- Clean rooms, exhibition halls and showrooms
- Demonstration areas and training rooms
- Washrooms, cloakrooms
- Wet and dry process areas
- Warehouses, loading bays and ramps
- Hangars
- Metallic decorative flooring systems

FOR USE ON MINERAL-BASED SUBSTRATE SUCH AS:

- Concrete
- Mortar
- Stone
- Epoxy Modified Mortars

FEATURES AND BENEFITS

- No VOC's
- Low Viscosity
- Excellent Abrasion Resistance
- Tenacious bond to most substrates
- High mechanical properties
- High Chemical Resistance
- High Durability
- Water Clear
- Solvent Free
- Seamless
- Easy and fast to apply
- Easily cleaned and maintained
- Waterproof
- Food Contact Safe:- <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=177.2280>

PHYSICAL PROPERTIES

Solid content	100 % w/w
Work time per pack	0.5 hours
Tack free time	4hrs @ 25 degrees C
Finish	Gloss
Abrasion Resistance	Very Good
Impact Strength	High
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

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

This product meets and exceeds APAS & Building Codes Australia

The critical radiant flux results can be considered as acceptable for Epoxy Resin Clear Glaze specimens in all building classes. The smoke development rate was also acceptable.

Sample Identification	Critical Heat Flux (kW/m2)			Smoke Value %.min		
	≤11	≤11	≤11	5	1	2
Epoxy Coating Kit Tinted EPO100T®	≤11	≤11	≤11	5	1	2
	Average: ≤11			Average: 3		
Epoxy Resin Clear Glaze EPO100G®	≤11	≤11	≤11	<4	<4	<4
	Average: ≤11			Average: <4		
Epoxy Resin Clear EPO100C®	≤11	≤11	≤11	<4	<4	<4
	Average: ≤11			Average: <4		

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 mechanically removed by grinding or other methods. Substrates heavily impregnated with oil must be cleaned by grinding or 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 EPO100G® 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 2 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. Measure sufficient Hardener and Resin to be used in 30 – 40 minutes.

APPLICATION

Mix EPO100G® Kit epoxy base (Part A) with the EPO100G® Kit curing agent (Part B). Use a mechanical mixer to ensure thorough mixing. The mixing ratio is 2/1 (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. EPO100G® Coating Kit does not require a 'sweat-in' or induction time and the mixed components should be used immediately.

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

For thicker applications, not greater than 4mm use notched squeegee or trowel and let self-level.

Re-coat within 48 hours without needing abrasion.

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. EPO100G® Coating Kit can be top-coated with a UV blocking coating absorber such as 500T® Tetrathane (Non-Yellowing Urethane)

COVERAGE

30L Kit – 120-180m². 2 Coats as a roll coat system.

4-6m² per litre depending on the porosity of the concrete as a primer.

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

RETURN TO SERVICE

Light Foot Traffic 24 Hours. 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

WARNING – ENVIRONMENTAL CONDITIONS

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.