



Designed and Formulated in Australia by APC

DESCRIPTION

100 % solids two-pack cycloaliphatic amine cured epoxy resin, designed for applications demanding high structural integrity, produces mortars exhibiting excellent adhesion and high structural strengths. The exceptional resistance to a wide variety of chemical spillage and fumes makes this product ideal for use in heavy industry or marine environments.

RECOMMENDED USES

- Binding Systems
- Coving
- Mortar
- Crack Repair
- Encapsulation
- Self-Level Systems

FEATURES AND BENEFITS

- Tile like finish
- Good chemical resistance
- Excellent adhesion
- High build application
- Food Contact Safe:- <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcr/CFRSearch.cfm?fr=177.2280>

Bond strength stronger than concrete itself

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



PHYSICAL PROPERTIES

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 specimens in all building classes. The smoke development rate was also acceptable.

Sample Identification	Critical Heat Flux (kW/m ²)			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 PREPARATION

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 EPO100C® 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.

MIXING

Quartz sand can be added to produce mortars and self-level compounds. See table below.

SELF LEVELING COMPOUND	1part liquid; 1-part fine quartz = 90 MPa
FLOWABLE MORTAR	1part liquid; 3 parts quartz = 70 MPa
TROWELABLE MORTAR	1part liquid; 4 parts quartz = 55 MPa
STIFF MORTAR	1part liquid; 6 parts quartz = 50 MPa



APPLICATION

- Pulp and paper mills
- Refineries
- Food processing plants
- Sewerage treatment plants
- Water storage tanks

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. EPO100C® Coating Kit can be top-coated with a UV blocking coating absorber such as 500T® Tetrathane (Non-Yellowing Urethane)

COVERAGE

Depending on the application use, as a pour on coating 1L per 1m² = 1mm in depth

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.

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.