

INDUSTRIAL & MARINE ART & CRAFT

Fast Cure Tinted Epoxy

Kit Sizes

Kit Sizes (Lt)	Mix Ratios
1.75Lt	6A:1B (1.5Lt A + 0.25Lt B)
3.5Lt	6A:1B (3Lt A + 0.5Lt B)
7Lt	6A:1B (6Lt A + 1Lt B)
14Lt	6A:1B (12Lt A + 2Lt B)
21Lt	6A:1B (18Lt A + 3Lt B)

Description

Fast Cure Tinted Epoxy FC110 is an industrial grade epoxy coating material for high performance floors. The product has various applications due to its excellent mechanical, chemical, electrical and adhesion properties to most substrates.

Two components (A & B) comes in tinted, 100% solid epoxy used as basecoat, primer or tinted finish surface, with chemical resistance and durability, ideal for variety of floor coating systems. Fast Cure Tinted Epoxy FC110 is a high-quality solvent-less, odorless two component coating system for concrete surfaces such as driveways, pathways, workshops and warehouses providing a tough clear film, high gloss and wet look to protect surface from stains, spills and wear. Fast Cure Tinted Epoxy FC110 has been developed specifically for Australian conditions using the latest epoxy technology. It provides excellent protection against weathering conditions and the splash and spillage of a wide range of chemicals. Fast Cure Tinted Epoxy FC110 provides a highly durable, chalk resistant, wear and chemical resistance surface for concrete floors. High quality epoxy floor coating system in many colours that is solvent free when used as coating or binder. The product can be tinted in all Australian Standard Colours. Tinted Epoxy coating has specially developed to be incorporated with non-slip materials and a large number of decorative materials to provide your desired floor finishing system, with functionality and style. The surface may be laid as a thin film using roller applicator. The thickness of the coating can be reduced by addition of Diluent. Aggregates may be added to the surface (while wet) to create a non-slip flooring finish. Modern, hygienic, functional and economical surface.

Features

Fast Cure Tinted Epoxy FC110 is supplied in two pack kit, Part A (Resin) and Part B (Curative or Hardener). Other parts such as pigment, flakes, decorative and non-slip materials can be supplied separately. Selected features of Fast Cure Tinted Epoxy FC110:





Suitable for Flake Flooring systems, see SHIMI

Superior Chemical Resistant Finished surface

Solvent Free (Unless you apply Diluent for

Engineered formulation for trafficable area

DIY Friendly, easy to apply and curable over a

Available with a wide range of Flakes for

Ideally compatible for Non-Slip Flooring

with high mechanical strength

wide range of temperature

decorative concrete

System.

FLAKE flooring system.

Excellent UV stability

thickness control)

- Modern, Hygiene, Functional and Economical.
- Heavy duty clear or pigmented coating for concrete and polished concrete floors.
- Highly resistant to chemical attack and pedestrian or vehicular traffic.
- Can be used in conjunction with graded aggregates to produce durable decorative floor finishes.
- Long lasting and easily maintained with good resistance to a wide range of domestic and commercial chemicals.
- Solvent free when used as a clear unpigmented coating or binder.
- Outstanding water resistance.
- Seamless, easy to clean and maintain.

Colour Chart

Standard Colours:

- White N14
- Black N61
- Neutral Grey N23

- Dark Grey N64
- Cream Y34
 - Charcoal B64

- Terracotta R52
- Bright Blue B23
- Dark Brown X65

EQUIPMENT

SHIMICOAT offers all Australian Standard AS2700 Colours, consisting of 206 colours. Please contact SHIMICOAT office for your custom design tint. Extra charges may apply.

Coverage

 1L covers approximately 5sqm per coat, depend on the conditions of the surface.

 First coat usually consumes more. Use of EPODIL (Epoxy Diluent /Thinner), up to 10% is recommended.

 Dry Film Coat (DFT One Coat):
 250microns

 Dry Film Coat (DFT Multi-Coat 250microns):
 Up to 5mm (5000microns)

 3sqm/Lt at 300microns per coat
 5sqm/Lt at 200microns per coat

 0.2sqm/Lt at 500micron (Maximum Built Epoxy Matrix)

Applications

Roller, Brush or Squeegee.

Dry Time at 25°C

Pot Life:	15 minutes at 25°C
Tack Free:	Half hours
Thin Film Set:	1 Hours (Min, depending on temperature and humidity)
Dry Cured:	3-4 hours – Foot Traffic (depending on temperature and humidity)
Fully Cured:	7 days (Vehicle Traffic)
Re-Coat:	4 Hours Intervals

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EQUIPMENT

Clean Up

Thinner & Diluent (Blend of Solvents).

Preparations

Clean and dry surface. Ensure surface to be coated is free of all dirt, grease, oil, paint, curing agents and other contaminants. Removal of Oil Contamination by degreaser and alkaline cleaning pressure wash Acid-wash to enhanced surface porosity and etch the surface. Ensure moisture free surface. Allow to completely dry, run Dry Test. Place a piece of plastic over a small area, tape the edges and leave for 1 hour. Remove plastic, if there is no moisture on either surface, concrete is sufficiently dry. Ideally, always consider surface grinding and removal of loose materials. Grinding is always advisable prior to application of all Shimicoat Epoxy products, to maximize adhesion. For further information, please refer to SHIMICOAT Instruction for "Surface Preparations".

Specifications

Physical & Chemical properties of Tinted Epoxy Premium 105TP:

Mix Ratios	6A:1B (Volume) or 9A:1B (Weight)			
	For Example: 6Lt of A (9Kg) & 1Lt of B (1Kg)			
Pot Life @25°C	15min			
Colour of Blend	Available in All Australian Standard AS 2700 Colours			
Specific Gravity (SG) of Blend	1.4			
Low Profile Coverage (Kg/sqm)	Roller Application (200micron) - 0.2Lt per sqm			
Maximum Temperature Surface Exposure (°C)	140			
Initial Cure Time (Hours)	24Hours			
Ultimate Cure Time (Days)	7 Days			
Compressive strength (ASTM D 695-85)	>70			
Tensile strength (ASTM D 638-86)	>15			
Flexural strength (ASTM D 790-86)	>15			
Hardness shore D (ASTM D2240-86)	>81			
Abrasion Resistance (ASTM D4060-90)	0.056 g/1000 cycle			

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	Reagent		Rating		
	Hydrochloric	: Acid	В		
S	Sulphuric Ac	id	С		
Acids	Acetic Acid		В		
A	Nitric Acid (10% max)	С		
	Phosphoric A	Acid (25% max)	В		
	Sodium Hydr	roxide	В		
alis	Ammonium	2	А		
Alkalis	Potassium H	ydroxide	В		
r	Sodium Hype	ochlorite (Bleach)	А		
	Xylene	, <i>, , , , , , , , , , , , , , , , , , </i>	А		
	Methyl Ethyl	Ketone (MEK)	С		
ts	Diesel		А		
Solvents	Ethanol		А		
olv	Acetone		В		
\sim	Kerosene		А		
	Petrol		А		
	Wine & Beer		А		
Code	Resistance	Description			
А	Excellent	Suitable for Long term immersion			
В	Good	Suitable for Short-term immersion (Max 3			
		days)	ays)		
С	Caution	Very short contact time is OK, spill and			
		splash			
D	Danger	Not Recommended			
Indicative reference only. Tested in laboratory conditions at 25°C.					

Specific resistance properties of Fast Cure Tinted Epoxy FC110, in harsh chemicals:

Resistance properties of Tinted Epoxy Premium 105TP:

Heat Resistant	140°C	Alkalis	Resist Short term immersion in all alkalis.
Weather Proofing	All Epoxy Coatings may yellow with time. Weatherproof top coat may be used if required.	Salts & Brines	Resist continuous or long-term immersior in all Salts & Brine systems.
Solvents	Resistant to most hydrocarbon solvents and alcohols.	Water	Excellent resist to continuous or long term immersion in fresh & Salt Water.
Acids	Resist splash and spills in all acids.	Abrasion	Excellent when fully cured (7 Days)

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EQUIPMENT



Direction

Mixing:

Mix thoroughly for a minimum 3 minutes manual or with mechanical mixer at low speed (750rmp Max). If mixing smaller portions mix at a ratio of 6A:1B by volume. For example, to prepare 3.5Lt mix, add 500mL of Part B into 3Lt of Part A:

- Ensure surface to be coated is dry, moisture can cause blooming and delamination.
- Pot life is very short and approximately 15 minutes, work within 15min to ensure easy flow application.
- SHIMI COLOURS, SHIMI METALLIC or SHIMI GLITTERS should be first added to Part A (Resin). Mix slowly using drill mixer on low speed. Mix for a few minutes to ensure completely homogenized without lump. Pour the bend into your tray and apply directly on the surface using the roller.
- Use steady long strokes and avoid overworking the roller or pushing your roller too quickly as this may trap air bubbles in the coating.
- Do not apply if the rain is expected within 24 hours of application.
- New concrete should be allowed to cure fully (at least 28days) before application.
- Keep the pail sealed when not in use. Avoid application on hot surfaces.

Drying Times

Fast Cure Tinted Epoxy FC110 cures in 3-4 hours at 25°C. High temperatures and windy conditions may speed the

curing time. Keep foot traffic off the final coat for at least 16 hours and	Temp °C	Pot Life (min)	Surface Dry (Hours)	Initial Cure (Hours)	Recoat Time (Hours)	Fully Cured (Days)
vehicles for at least 7	10°C	45	12	24	24	7 Days
days. Full hardness is	20°C	40	10	18	18	7 Days
achieved after 7 days.	30°C	35	8	16	16	7 Days

WARNING

- Heavy vehicles with hot tires may cause damage on driveway. Avoid driving over the new coated floors till completely cured (7 Days). For parking the car, place a mat under each tire during the first few weeks to ensure longevity of your new floor.
- Do not apply Fast Cure Tinted Epoxy FC110, if the concrete has a patchy appearance as moisture may be present. Dry Test prior to application.
- Direct sunlight and UV radiation my result in chalking, colour variations and yellowing effect over time. UV resistance topcoat shall be used.

Storage

The products shall be stored out of direct sunlight and heat at all times. The shelf life of the product is 24 months, mix uniformly for 3 minutes prior to use.

DISCLAIMER

Material Safety Data Sheet, Technical and Environmental Data Sheet can be provided upon request.

The information provided in this document is guidance only and considering the uses of this product are beyond the seller's control, the product is sold without guarantees or warranties. Warranties and guarantees shall be governed by SHIMICOAT Standard Terms of Sale. The purchaser shall make its own tests to determine the suitability for their specific application, and Shimicoat Pty Ltd is taking no responsibility for misuse of the product. The purchaser assumes all risk of use and handling of this product. This product will be happily replaced or credited back if defective. Beyond this, Shimicoat Pty Ltd is not liable for any damages caused by this product or its use.

This information and all further technical advice are based on our present knowledge and experience.

The customer is not released from the obligation to conduct careful inspection and testing of supplied goods.

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