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SHIMICOAT
SURFACE SOLUTIONS



Fast Cure Clear Epoxy

Kit Sizes

Kit Size (Lt)	Mix Ratio
1.25Lt	4A:1B (1Lt A + 0.25Lt B)
2.5Lt	4A:1B (2Lt A + 0.5Lt B)
5Lt	4A:1B (4Lt A + 1Lt B)
12.5Lt	4A:1B (10Lt A + 2.5Lt B)
25Lt	4A:1B (20Lt A + 5Lt B)

Description

Fast Cure Clear Epoxy FC115 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 clear 100% solid epoxy used as clear topcoat with chemical resistance and durability, ideal for variety of floor coating systems. Fast Cure Clear Epoxy FC115 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 Clear Epoxy FC115 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 Clear Epoxy FC115 provides a highly durable, chalk resistant, wear and chemical resistance surface for concrete floors. High quality topcoat epoxy floor coating system that is solvent free when used as a clear un-pigmented coating or binder. This coating has specially developed to be incorporated with non-slip materials and a large number of decorative materials to provide a 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 blend to create a non-slip flooring finish. Fast Cure Clear Epoxy FC115 has a high yellowing tendency, especially under the sun and UV ray, the surface yellow soon. Use it ONLY if fast cure properties are highly desirable, and yellowing effect is acceptable, otherwise; use Ultra Clear Epoxy UC100 with longer cure time. We recommend using Ultra Clear Epoxy (normal cure time) as your first option due its certain desirable properties. However, if you need to "Back to Service" fast and quick, Fast Cure Clear Epoxy is highly desirable with 2-3hours cure time. Modern, hygienic, functional and economical surface.



MATERIALS



CHEMICALS



RESINS



EQUIPMENT

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Features

Fast Cure Clear Epoxy FC115 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 Ultra Clear EPOXY 100UC:

- Modern, Hygiene, Functional and Economical.
- Ideal for fast floors, cures in 2 Hours at 25°C.
- 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.
- Suitable for Flake Flooring systems, see SHIMI FLAKE flooring system.
- Superior Chemical Resistant Finished surface
- Excellent UV stability
- Solvent Free (Unless you apply Diluent for thickness control)
- Engineered formulation for trafficable area with high mechanical strength
- DIY Friendly, easy to apply and curable over a wide range of temperature
- Available with a wide range of Flakes for decorative concrete
- Ideally compatible for Non-Slip Flooring System.

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) is recommend, up to 10%.

Applications

Roller, Brush or Squeegee.

The product is a Fast Cure and you only have 15min per mix to apply. Mix in small portions to avoid overheating.

Fast Cure Clear Epoxy FC115 is a high yellow epoxy product. It is not recommended for under the sun surfaces as it tends to yellow.

The product is a Fast Cure and heat up if remains in pot for more than 10min. Once mixed, apply/pour on surface as soon as you can and allow to cool down, while rolling, brushing or squeegeeing. Epoxies curing process is exothermic and, while in pot, they cure faster. Slow down the curing process by pouring on the surface and out of the Pot.

If Fast Cure properties are highly desirable, use Fast Cure Clear Epoxy FC115, otherwise, use Ultra Clear Epoxy UC100 which is normal cure.

Dry Time at 25°C

Pot Life:	10 minutes at 25°C
Tack Free:	45min
Thin Film Set:	1 Hours (Min, depending on temperature and humidity)
Dry Cured:	2-3 hours – Foot Traffic (depending on temperature and humidity)
Fully Cured:	7 days (Vehicle Traffic)
Re-Coat:	4 Hours



MATERIALS



CHEMICALS



RESINS



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 Ultra Clear EPOXY 100UC:

Pot Life @25°C	45min
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) - 0.2Kg of Blend 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)	80-90
Tensile strength (ASTM D 638-86)	50
Flexural strength (ASTM D 790-86)	80-90
Hardness shore D (ASTM D2240-86)	81
Abrasion Resistance (ASTM D4060-90)	0.056 g/1000 cycle

Specific resistance properties of Ultra Clear EPOXY 100UC, in harsh chemicals.

Media	Reagent	Rating
Acids	Hydrochloric Acid	B
	Sulphuric Acid	C
	Acetic Acid	B
	Nitric Acid (10% max)	C
	Phosphoric Acid (25% max)	B
Alkalis	Sodium Hydroxide	B
	Ammonium Hydroxide	A
	Potassium Hydroxide	B
	Sodium Hypochlorite (Bleach)	A
Solvents	Xylene	A
	Methyl Ethyl Ketone (MEK)	C
	Diesel	A
	Ethanol	A
	Acetone	B
	Kerosene	A
	Petrol	A
	Wine & Beer	A
Code	Resistance	Description
A	Excellent	Suitable for Long term immersion
B	Good	Suitable for Short-term immersion (Max 3 days)
C	Caution	Very short contact time is OK, spill and splash
D	Danger	Not Recommended
Indicative reference only. Tested in laboratory conditions at 25°C.		

Resistance properties of SHIMI CLEAR EPOXY 100:

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 immersion 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)

Direction

Mixing:

Mix thoroughly for a minimum 2-3 minutes manual or with mechanical mixer at low speed (750rpm Max).

If mixing smaller portions mix at a ratio of 4A:1B by volume. For example, to prepare 5Lt mix, add 1Lt of Part B into 4Lt of Part A.

- Ensure surface to be coated is dry, moisture can cause blooming and delamination.
- Pot life is approximately 15 minutes, work within 10min 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.
- Not recommended for use below 10°C or above 35°C.
- New concrete should be allowed to cure fully (at least 20days) before application.
- Keep the pail sealed when not in use. Avoid application on hot surfaces.

Drying Times

Fast Cure Clear Epoxy FC115 dries in 3-4 hours. High temperatures and windy conditions may speed the curing time. Keep foot traffic off the final coat for at least 16 hours and vehicles for at least 7 days. Full hardness is achieved after 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 care, place a mat under each tire during the first few weeks to ensure longevity of your new floor.
- Do not apply Ultra Clear EPOXY 100UC, if the concrete has a patchy appearance as moisture may be present. Dry Test prior to application.
- Direct sunlight and UV radiation may result in chalking, colour variations and yellowing effect over time.
- Fast Cure Epoxy is highly susceptible to yellowing when exposed to direct sunlight.
- This product is a fast cure with short 10min pot life. Apply fast and thin to cool down.
- Exothermic reaction, apply to surface fast and as thin as possible.
- Not suitable for Pour-On and Deep Cast applications

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.