RESIDENTIAL & COMMERCIAL

INDUSTRIAL & MARINE

ART & CRAFT

SHIMICOAT
SURFACE SOLUTIONS

Fiberglass Clear Epoxy

Kit Sizes

Kit Sizes (Vol)	Mix Ratios
750mL	2A:1B (0.5Lt A + 0.25Lt B)
1.5L	2A:1B (1Lt A + 0.5Lt B)
3L	2A:1B (2Lt A + 1Lt B)
6L	2A:1B (4Lt A + 2Lt B)
15L	2A:1B (10Lt A + 5Lt B)
30L	2A:1B (20Lt A + 10Lt B)

Description

Fiberglass Epoxy is especially formulated for ideal bonding to fiberglass and forming a permanent matrix. The product is an industrial grade epoxy coating material for high performance and functionality. Widely used in marine industries for surface repair, filling, boat hulls and structures with superior moisture barrier properties. Fibreglass Epoxy is a premium laminating two pack epoxy resin with low/medium viscosity and easy to apply. The product has many other applications due to its excellent mechanical, chemical, electrical and adhesion properties to most substrates such as concrete, timber, stone, laminate, glass, aluminum and other metal surfaces. Fiberglass Epoxy can be modified with fillers such as wood powder, colloidal silica fume, silica sand and super ceramic to be used as patch & repair compound for filling, leveling and fairing compound with outstanding results.

Two components (A & B) comes in clear 100% solid epoxy used as clear topcoat with chemical resistance and durability, ideal for variety of coating applications. Fiberglass Epoxy is a high-quality solvent-less, odorless two component coating system for variety of fiberglass materials with different porosity and surface finish. Fiberglass Epoxy 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.

Fiberglass Epoxy provides a highly durable, chalk resistant, wear and chemical resistance surface. High quality topcoat epoxy surface coating system that is solvent free when used as a clear un-pigmented coating or binder. The product can be tinted in all Australian Standard Colours. The thickness of the coating can be reduced by addition of Diluent. The product may show yellowing effect if exposed to UV radiation of sunlight. Fiberglass Epoxy is engineered for undercover surfaces. Guaranteed modern, hygienic, functional and economical surface.

SHIMICOAT
SURFACE SOLUTIONS

Features

Fiberglass Epoxy 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. Some selected features of Fiberglass Epoxy:

- 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 un-pigmented 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
- 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

250mL to saturate one sqm of Fiberglass cloth (250gr).
First coat usually consumes more and the subsequent coats less.

Applications

Roller, Brush or Squeegee.

Dry Time at 25°C

Pot Life:	45 minutes at 25°C
Tack Free:	2-3 hours
Thin Film Set:	8 Hours (Min, depending on temperature and humidity)
Deep Cast Set:	24 Hours (Min, depending on temperature and humidity) 10mm Max
Dry Cured:	12-16 hours – Foot Traffic (depending on temperature and humidity)
Fully Cured:	7 days (Vehicle Traffic)
Re-Coat:	Subsequent Immediate Coating

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. Ensure moisture free surface. Allow to completely dry, run Dry Test if necessary.
For further information, please refer to SHIMICOAT Instruction for “Surface Preparations”.

Ph: (08) 9364 7446 | info@shimi.com.au | ABN: 28 622 871 283 | **www.shimi.com.au**

SHIMICOAT
SURFACE SOLUTIONS

Specifications

Physical & Chemical properties of Fiberglass Epoxy:

Mix Ratios	2A:1B (Volume) or 2A:1B (Weight) *For Example: 2Lt of A (2Kg) & 1Lt of B (1Kg)*
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 Fiberglass Epoxy, in harsh chemicals.

	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 Fiberglass Epoxy:

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 3 minutes manual or with mechanical mixer at low speed (750rmp Max).
If mixing smaller portions mix at a ratio of 2A:1B by weight or volume. For example, to prepare 1.5Lt mix, add 500mL of Part B (Curative or Hardener) into 1Lt (1,000gr) of Part A (Resin). If colour required, add SHIMI COLOURS to the kit and mix again thoroughly.

- Ensure surface to be coated is dry, moisture can cause blooming and delamination.
- Pot life is approximately 45 minutes, work within 30min 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.
- Not recommended for use below 10°C or above 35°C.
- Keep the pail sealed when not in use. Avoid application on hot surfaces.
- Not Recommended for Directly Under the Sun surfaces as it may yellow

Drying Times

Fiberglass Epoxy dries in 8-10 hours. High temperatures and windy conditions may speed the curing time. Keep foot traffic and heavy objects off the final coat for at least 16 hours and vehicles for at least 7 days. Full hardness is achieved after 7 days.

Temp °C	Pot Life (min)	Surface Dry (Hours)	Initial Cure (Hours)	Recoat Time (Hours)	Fully Cured (Days)
10°C	45	12	24	24	7 Days
20°C	40	10	18	18	7 Days
30°C	35	8	16	16	7 Days

WARNING

- Direct sunlight and UV radiation my result in chalking, colour variations and yellowing effect over time. For under direct sunlight, Polyaspartic, Polyurea or Polyurethane coating materials shall be used over epoxy as topcoat for protection.

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.
For further information, consult Technical and Material Safety Data Sheet of the product or contact SHIMICOAT Technical Department for further advice.

Ph: (08) 9364 7446 | info@shimi.com.au | ABN: 28 622 871 283 | **www.shimi.com.au**