

SHIMI HB EPOXY 105

High Build Basecoat



Two components clear or pigmented <60% solid epoxy used as basecoat with chemical resistance and durability, ideal for variety of floor coating systems.

SHIMI HB EPOXY is a high quality solvent-less two component coating system for concrete surfaces such as driveways, pathways, workshops and warehouses providing a tough tintable basecoat to protect surface from wear and corrosion, offering a modern, hygienic, functional and economical surface.

Description

SHIMI HB 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.

SHIMI HB EPOXY 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. The product can be tinted in all Australian Standard Colour. This coating has specially developed to provide a non-slip and UV Resistant finish to the floor 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.

Features and Properties

SHIMI HB EPOXY is supplied in two packs kit, Part A (Resin) and one of Part B (Curative or Hardener). Other parts such as pigment, flakes and non-slip materials can be supplied separately.

Some selected features of SHIMI CLEAR 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
- Excellent UV stability
- Solvent Free (Unless you apply Diluent for thickness control)
- Engineered formulation for trafficable area with high mechanical strength
- Easy to apply and curable over a wide range of temperature
- Compatible with aggregates for no-slip finish (~3Kg Aggregates / L)
- Available in all Australian Standard colours 2700 (25gr of Pigment / L)
- Available with a wide range of Flakes for decorative concrete
- Ideally compatible for Non-Slip Flooring System.

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Table 1: Physical & Chemical properties of SHIMI CLEAR EPOXY 105.

Pot Life (Min @25°C)	45
Colour of Blend	Snow White <i>Pigment-able & Tintable to any colour with great coverage</i>
SG¹ of Blend	1.2
Low Profile Coverage (Kg/sqm)	0.3Kg of Blend per sqm (200 μ) <i>3Kg Kit covers 10sqm</i>
Aggregate Coverage (Kg /sqm)	1.0Kg (2.5mm non-slip) of Blend per sqm <i>15Kg Kit covers 15sqm</i>
Sand Aggregate (30-50Mesh) / Kg Blend	2.5Kg Sand per sqm
Pigment for colouring	0.1Kg Pigment per 1.0L of Blend (10%), can be applied within 8-12% range, based on colour
Maximum Temperature Exposure (°C)	140
Initial Cure Time (Hours)	24
Ultimate Cure Time (Days)	7 Days

Table 2: Overall resistance properties of SHIMI CLEAR 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)

¹ Specific Gravity

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Table 3: Specific resistance properties of SHIMI HB 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

Indicative reference only. Tested in laboratory conditions at 25°C.

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|----|-----------|-----------------------------------|
| A: | Excellent | Long-term immersion |
| B: | Good | Short-term immersion (Max 3 days) |
| C: | Caution | Spill and splash |
| D: | Danger | No contact |

Application

- 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.
- 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.

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Coverage

2sqm/L for 500 micron build per coat (multi-coating is advisable to increase the thickness).
4 sqm/L for 250 micron build per coat (multi-coating is advisable to increase the thickness).

Preparation

Ensure surface to be coated is free of all dirt, grease, oil, paint, curing agents and other contaminants. Grinding is always advisable prior to application of all Shimicoat Epoxy products, to maximize adhesion. 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.

Mixing

Mix thoroughly for a minimum 3 minutes manual or with mechanical mixer at low speed (750rpm Max). If mixing smaller portions mix at a ratio of 2A:1B by weight. For example, to prepare 1.5Kg mix, add 500g or Part B into 1.0Kg (1,000gr) of Part A. If colour required, add SHIMI COLOURS to the kit and mix again thoroughly.

Drying Times

SHIMI HB EPOXY dries in 6-8 hours. High temperatures and windy conditions may speed the drying time. Apply the first coat, letting to cure overnight and applying the second coat the next day.

Keep foot traffic off the final coat for at least 8 hours and vehicles for at least 48 hours. Full hardness is achieved after 3 days.

WARNING

- Heavy vehicles with hot tires may cause damage on driveway. Avoid driving over the new coated floors till completely cured (72 Hours). For parking the care, place a mat under each tire during the first week to ensure
- Do not apply SHIMI HB EPOXY 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. 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 15 minutes prior to use.

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Most Popular Colours:

Mist Blue – B33
Basalt Grey – N54

Brown – X54
Cream – Y34

White – N14
Black – N61



DISCLAIMER

Environmental Data Sheet and bioassay information 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 our Standard Terms of Sale of Shimicoat Pty Ltd. 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 incoming goods.

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