

INDUSTRIAL & MARINE ART & CRAFT



Epoxy Metallic Floor Complete Kit

Kit Sizes

5sqm Kit Contains

Product Description	Size	Code	Quantity
Premium Tinted Epoxy	2Lt	PT	1
Ultra-Clear Epoxy	3Lt	UC	1
Pearlescent Powder Pigment 1	60gr	PP	1
Pearlescent Powder Pigment 2	30gr	PP	1
UVthane PLUS	1.15Lt	UP	1

10sqm Kit Contains

Product Description	Size	Code	Quantity
Premium Tinted Epoxy	4Lt	PT	1
Ultra-Clear Epoxy	6Lt	UC	1
Pearlescent Powder Pigment 1	120gr	PP	1
Pearlescent Powder Pigment 2	60gr	PP	1
UVthane PLUS	2.3Lt	UP	1

25sqm Kit Contains

Product Description	Size	Code	Quantity
Premium Tinted Epoxy	8Lt	PT	1
Ultra-Clear Epoxy	15Lt	UC	1
Pearlescent Powder Pigment 1	240gr	PP	1
Pearlescent Powder Pigment 2	120gr	PP	1
UVthane PLUS	4.6Lt	UP	1

40sqm Kit Contains

Product Description	Size	Code	Quantity
Premium Tinted Epoxy	12Lt	PT	1
Ultra-Clear Epoxy	15Lt	UC	2
Pearlescent Powder Pigment 1	240gr	PP	1
Pearlescent Powder Pigment 2	120gr	PP	1
UVthane PLUS	4.6Lt	UP	1



MATERIALS



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RESINS



EQUIPMENT



60sqm Kit Contains

Product Description	Size	Code	Quantity
Premium Tinted Epoxy	16Lt	PT	1
Ultra-Clear Epoxy	30Lt	UC	1
Ultra-Clear Epoxy	15Lt	UC	1
Pearlescent Powder Pigment 1	280gr	PP	1
Pearlescent Powder Pigment 2	140gr	PP	1
UVthane PLUS	7Lt	UP	1

90sqm Kit Contains

Product Description	Size	Code	Quantity
Premium Tinted Epoxy	20Lt	PT	1
Ultra-Clear Epoxy	30Lt	UC	2
Pearlescent Powder Pigment 1	280gr	PP	1
Pearlescent Powder Pigment 2	280gr	PP	1
UVthane PLUS	15Lt	UP	1

Colour Chart – Basecoat Epoxy

Standard Colours:

White N14

Black N61

Neutral Grey N23

Dark Grey N64

Cream Y34

Terracotta R52

Bright Blue B23

Dark Brown X65

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

Colour Chart – Pearlescent Topcoat PourOn Epoxy

You can choose any combination for your metallic colour finish. We recommend choosing lighter colours such as Pearl White, Silver Frost, Milky Marble as main colour and any other colours as feature/contrast colour. If you wish to get darker surface, you may choose Gun Metal which provides smoky black appearance.

Copper Cup

Dragon Gold

Flame Red

Forest Green

Grass Green

Gun Metal

Lime Green

Pink Perfect

Royal Blue

Coffee Club

Silver Frost

Sunshine Yellow

Vibrant Purple

Wild Orange

Pearl White

Milky Marble

Metallic Yellow

Teal

Turquois

Cobalt Aqua

Coverage

Each kit is designed to its maximum coverage with best approximate material proportions. The kits are designed for >750micron topcoat thickness. Extra thickness of Clear Topcoat Epoxy may be desirable, which can be purchased separately "Ultra Clear Epoxy".









EQUIPMENT

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



Applications

Roller, Brush or Squeegee.

Prime Coat: One Coat as Prime Coat in your choice of colour

One Coat as Base Coat in same colour as Basecoat for ideal coverage **Base Coat:**

Main/Dominant Metallic: 10-20g/L of Dominant Metallic Pearlescent Powder **Feature/Contrast Metallic:** Small quantity of Feature Metallic Pearlescent Powder

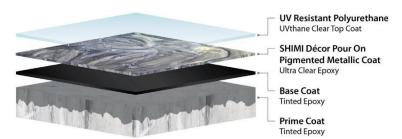
Pour-On Metallic Epoxy at a rate of 0.5-1.0L/sqm (The kit is designed for 750micron/sqm)

Description

High-End Decorative Flooring Systems:

SHIMICOAT Metallic Marble is a decorative marble appearance flooring system for **Residential & Commercial applications** available in a wide range of finishes, Matte, Semi-Gloss or High Gloss.

Unique in style, design and patten to create



your own floor of beauty matching the colour scheme in your home, showroom or display surfaces. Pearlescent Metallic Pigments used in epoxy resin to create unique marbleized floor coatings, presenting pearlescent, shimmering and iridescent accents with gleaming finishes. The gloss can be regulated over a range of matte, semi to high gloss finishes. Metallic luster floor coatings are the latest technology where art and industrial applications merge. Ideally suitable for commercial application, retail environments and residential customers seeking longevity and point of difference. Manufactured by SHIMICOAT, the products are odorless, self-levelling and easy to apply and engineered to be ideally suitable for Australian conditions.

Dry Time at 25°C

Each Coat (Basecoat/Main-Coat and Ultra Clear *Pour-On* Topcoat):

Parameter	Premium Tinted Epoxy (Basecoat/Main-Coat)	Ultra Clear Epoxy (Topcoat)
Pot Life:	45 minutes at 25°C	45 minutes at 25°C
Tack Free:	2-3 hours	2-3 hours
Thin Film Set:	8 Hours (Minimum)	8 Hours (Minimum)
	Depending on temperature and humidity	Depending on temperature and humidity
Dry Cured:	12-24 hours – Foot Traffic (depending on	12-24 hours – Foot Traffic (depending on
	temperature and humidity)	temperature and humidity)
Fully Cured:	7 days (Vehicle Traffic)	7 days (Vehicle Traffic)
Re-Coat:	Overnight (16Hours)	Overnight (16Hours)

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"

Description of Components

Basecoat/Main-Coat Premium Tinted Epoxy:

Premium Tinted Epoxy 105PT 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

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. Premium Tinted Epoxy 105PT is a highquality 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. Premium Tinted Epoxy 105PT 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. Premium Tinted Epoxy 105PT 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.

Ultra Clear Topcoat Epoxy:

Ultra Clear EPOXY UC100 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. Ultra Clear EPOXY UC100 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. Ultra Clear EPOXY UC100 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. Ultra Clear EPOXY UC100 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 unpigmented coating or binder. The product can be tinted in all Australian Standard Colours.

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. Modern, hygienic, functional and economical surface.











Pearlescent Metallic Pigments:

SHIMICOAT Metallic Pearlescent Pigments

For Special Effect Resurfacing Systems

SHIMICOAT Metallic Pearlescent Pigments are special luster effect pigments composed of mica nano-particles coated with various inorganic pigments to create metallic effects that mimic the natural look of stone, marble, granite and rock formations. These unique pigments are designed to be blended with our 100% solids clear Epoxy resins. When the metallic particles are mixed with epoxy, they give the coating a shine and gleam that reflects light and creates eye-catching dramatic effects.

Metallic Pearl Powder Pigments in Epoxy:

Metallic Pearlescent Pigments are commonly used in epoxy coating systems as the mid coat (second coat) over the primer/basecoat Epoxy. Metallic pigments should be mixed with clear epoxy and installed over an epoxy tinted base coat. The most popular basecoats are Onyx Black or Pearl White. Typically, people use black for base coat. If you're just using the metallic powder pigments in a clear coat you need to put your coating on much thicker than normal rolling or brushing, in order to cover and achieve the desirable color. We normally recommend 500-1000micron Clear Topcoat, which is 500mL to 1Lt per sqm resin. 250gr container of Metallic Pearlescent Powder Pigment shall be added into 15 Liter of 100% solids epoxy to be enough for 15sqm of coverage of rich 1000µ coating. There is no limit on how thick you can apply the Ultra Clear Topcoat and can be applied 2 or 3 or even 5mm thickness. Please note each 1.0mm is equal to 1000 Micron and require one liter of epoxy resin. Metallic Pearlescent Powder Pigment can be used in floor coating, countertop resurfacing, wall paints, plastic molding, ink applications, arts and crafts. Always test your method of use before applying to your entire project. Our Pearlescent Powder Pigments being used globally to create unique stunning Polyurethane & Epoxy Resin designs. It is a great fun to play with these pigments and create your own unique and exotic colour combinations. Using our Pigments, you will be guaranteed; Non-bleed or Fading, Non-Rust or Toxic, Vegan & Cruelty Free, Food and Drug Administration (FDA) compliance and temperature resistance so can be used for worktops and floors with underfloor heating.

Shimicoat Pearlescent Powder Pigments mix well with any clear epoxy on the market and disperse rapidly.

Composition of SHIMICOAT Pearlescent Powder Pigments

SHIMICOAT Pearlescent Powder Pigments contain the following mineral and inorganic compounds at different ratios for various colours and effects:

Mica

Selenium Dioxide (SnO₂)

Titanium Dioxide (TiO₂)

Ferric Iron Oxide (Fe₂O)

SHIMICOAT Pearlescent Pigment Powders are composed of above metal oxide layers of moldy mica. Pearl pigments change the thin layer of metal oxide to produce different pearlescent effects. Compared with other pigments, pearlescent pigments have an unparalleled effect on the unique soft pearl luster. The special surface structure, high refractive index and good transparency make it the same effect as pearl in a transparent medium. It contains 100% naturally occurring inorganic compounds.

The excellent chemical and high temperature resistance of pearlescent pigments offers its potential for wide application in coatings, inks, plastics and many other fields. They provide a new color system and color quality for these products. SHIMICOAT Pearlescent pigments are low in heavy metal and meet the safety standards to be used in many commercial and domestic applications. Both acid and alkali cannot attack pearlescent pigment at room temperature. SHIMICOAT Pearlescent Pigment cannot burn, is not self-igniting, is not conductive, and can withstand high temperatures of 600~800 °C. Pearlescent pigments can also be used in reactive coatings for radiation curing systems (electron multiply curing, photocuring). SHIMICOAT Pearlescent Powder Pigments ore one of our most versatile product that can be used to create your desirable metallic or pearlescent effect in many resin systems.









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The product may be used in acrylics, oils, printing inks, encaustics, alcohol inks, epoxy, glues, casting resins, clay, varnishes, etc. Pearlescent Pigments are safe, inert pigment that exhibits extreme colorfastness and stability. The different particle sizes produce different effects, from a smooth pearly luster, to a highly metallic sheen. The product creates a metallic effect without being a real metal—it will never tarnish or fade!

Note: SHIMICOAT Pearlescent Pigment Powders are specifically engineered for art/craft materials, surface coating and industrial applications. They are NOT recommended for cosmetic use.

Features

SHIMICOAT Epoxy Metallic Flooring System includes basecoat which is a durable foundation for rich and high build Ultra Clear Topcoat Epoxy, to support and ensure longevity of finished surface. Ultra Clear Topcoat Epoxy can be pigmented in many pearlescent colours with below features:

- Modern, Hygiene, Functional and Economical
- Highly resistant to chemical attack, spillage and heat (up to 140°C)
- Outstanding water resistance
- Seamless, easy to clean and maintain
- Superior Chemical Resistant Finished surface
- Solvent Free (Unless you apply Diluent for thickness control)
- Provides a beautiful three-dimensional appearance
- Unique in design offering the illusion of ripples, craters and swirl
- DIY Friendly, easy to apply and curable over a wide range of temperature

Specifications					
Physical & Chemical properties of Topcoat "Ultra Clear Epoxy UC100":					
Pot Life @25°C	45min				
Colour of Blend (Clear & Untinted)	Water Clear to Pale Amber				
Specific Gravity (SG) of Blend	1.0				
Low Profile Coverage (Kg/sqm)	Roller Application (200micron) - 0.2Kg of Blend per sqm				
	3Kg Kit covers 15sqm (Roller Application)				
	Pour-On Application for Metallic Effect:				
	500mL to 1Lt per sqm (500micron to 1000micron Thickness)				
	Thicker Clear Topcoat can be applied, if desirable.				
Maximum Temperature Exposure (°C)	140				
Initial Cure Time (Hours)	24				
Ultimate Cure Time (Days)	7 Days				



MATERIALS CHEMICALS RESINS







Specific resistance properties of Ultra Clear EPOXY UC100, in harsh chemicals:

Media	Reagent		Rating	
	Hydrochloric	Acid	В	
<u>s</u>	Sulphuric Aci	d	С	
Acids	Acetic Acid		В	
Ā	Nitric Acid (10% max)		С	
	Phosphoric A	cid (25% max)	В	
۲0	Sodium Hydr	oxide	В	
a <u>i:</u>	Ammonium	Hydroxide	Α	
Alkalis	Potassium H	ydroxide	В	
4	Sodium Hypo	ochlorite (Bleach)	А	
	Xylene		A	
	Methyl Ethyl	Ketone (MEK)	С	
ts	Diesel		A	
Solvents	Ethanol		A	
$\stackrel{>}{\sim}$	Acetone		В	
Sc	Kerosene		Α	
	Petrol		Α	
	Wine & Beer		Α	
Code	Resistance	Description		
Α	Excellent	Suitable for Long term	immersion	
В	Good	Suitable for Short-term immersion (Max 3 days)		
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.				

Resistance properties of Ultra Clear Epoxy UC100:

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)



MATERIALS CHEMICALS RESINS







Direction

Metallic Floor Finishing System

An Installation Guide

Following is a step by step guide to install Metallic Floor Finishing System using Shimicoat Products and Materials over concrete surface floor.

Products and Materials

- Epoxy Repair Kit
- Basecoat Epoxy "Premium Tinted Epoxy in your choice of colour"
- Ultra Clear Epoxy Topcoat (Indoor),
- Diluent / Thinner
- Metallic Pearlescent Powder or Liquid in your choice of colours (Dominant and Feature)

Tools:

- Electric mixer or stick for mixing resin
- Brush and Rollers
- Extendable Handle / Pole
- Squeegee (Notched or Flat)
- Vacuum or blower to clean up the surface
- Spike shoes

Installation:

Surface Preparations:

- Prepare the floor by concrete grinding and removal of surface materials.
- Use Epoxy Repair kit as required to fill any cracks, holes or damages on the surface.
- Ensure the surface is perfectly clean and free of oil and grease. If grinder is unavailable, acid wash and make sure you wash, rinse and flush with detergent to neutralize the surface and remove all acid residue.
- Vacuum and/or blow out to remove dust from the surface.
- Tape all around the walls and cover all surfaces that you wish NOT to be epoxy coated.

NOTE: For further information on surface preparation, please refer to our brochure, website or contact Shimicoat technical representative.

Basecoat Application:

- 1. Mix basecoat epoxy in small portion that you can manage to apply.
- 2. Premium Tinted Epoxy has a maximum of 40min Pot Lift, plan to complete your application within 30minuts allowing a few minutes for unexpected situations.
- 3. Ideally, we recommend mix 3Lt of Part A and 1Lt of Part B (4Lt blend) for one or two people working on a small double garage floor.
- 4. Apply the basecoat epoxy to corners, edges first then the main floor.
- 5. While still wet, broadcast flake at your desired density, Full Broadcast or Partial Broadcast.
- 6. Remember wet-edge allowance, always leave a wet skirting (20-30cm) to be flaked with the next area of coating. Avoid coating over Flakes.
- 7. Let it cure. 2-3 hours for Fast Floor, 8-12 hours for normal curing epoxy.

NOTE: Add Epoxy Diluent or Xylene up to 10% to thin the product, only if required for example in cold days and only for the basecoat. DO NOT add diluent to the topcoat.



Pour-On Application:

- 1. When the surface is cured and touch-dried, plan to apply metallic topcoat.
- 2. Add your metallic Pearlescent Powder or liquid (~10-30g per Lt of Resin) into your resin (Part A). It may be desirable the pearlescent resin to be prepared in advance to ensure pigments are dispersed well into the resin, minimizing shooting stars. Mix well using an electric mixer at low speed for min 2 minutes.
- 3. If you are having two or more contrast effects, take out some small quantity of resin and prepare the colours accordingly.
- 4. When ready, add the correct quantity of Hardener / Curing Agent into the Pearlescent treated resin (Part A).

NOTE: Now you are on the clock, DO NOT waste time, initiate application. You must be prepared for application. One person applies the corners and edges using baby-roller or a brush and another person apply to the main floor. Pour the resin on the floor, and use a notched squeegee or a similar tool plus roller to spread-out the resin over the entire floor. Calculate to apply 1L per sqm.

- 5. Add the contract colours and back roll over the entire floor with spike shoes ON.
- 6. Use your roller to go over the entire floor till you are happy with its appearance.
- 7. Clear the floor, wipe and clean all your tools.
- 8. Wear your spike shoes and take the masking tapes off the walls as it will be too hard to take off when cured.
- 9. When application is complete and you are happy with the appearance of the floor, let it cure for a minimum of 8 hours, ideally overnight 16 hours.
- 10. You can use hot gun (hot air blower) or other devices to go over the surface and burst any bubbles forming. If you are using Xylene or any flammable liquid DO NOT apply any naked flame or hot air over the surface.
- 11. No driving or stretching furniture over the floor for 1 week. Treat it with care, especially during the first few days.
- 12. It may take a week or more till the Epoxy reaches its optimal hardness and strength.

NOTE: Add Metallic Pearlescent Powder in small increments, increase dosage if using liquid pigment, to your desired effect.

For further advise, please refer to our website or contact technical team at Shimicoat. End of Procedure.

Mixing:

Mix thoroughly for a minimum 3 minutes manual or with mechanical mixer at low speed (750rmp Max). Please mix in correct ratios, read your product label and quantify accordingly.

- 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.
- 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 Time

Premium Tinted Epoxy PT105 cures in 8-16 hours depending on temperature (10hours at 25°C). High temperatures and windy conditions may speed the curing time.

Ultra Clear Epoxy UC100 cures in 8-20 hours depending on temperature (10hours at 25°C). High temperatures and windy conditions may speed the curing time.

Keep away from the final coat for at least 16 hours and heavy objects for at least 7 days. Full hardness/Complete Curing Process 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

- Heavy objects with hot tires may cause damage on driveway. Use the surface once cured, however, avoid
 placing heavy objects over the new coated surface till completely cured (7 Days).
- Do not apply Premium Tinted Epoxy PT105, if the surface 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.

Storage

All 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.