

# METALLIC ART EPOXY EP100®

Date of Issue – September 2020 V1.5  
This Technical Data Sheet replaces all previous versions.

## DESCRIPTION

**Metallic Art Epoxy EP100®** is a 100% solid, high gloss, self-levelling, solvent free, colour stable two pack epoxy, specifically formulated to enhance the lustre of metallic colour pigments. DCC Metallic Colour Pigments™ are particles coated with various distinct pigments to create pearlescent and iridescent effects that mimic the natural look of stone and rock formations. These unique pigments combined with Metallic Art Epoxy EP100® are designed to give the coating a shine that reflects light and creates an eye-catching dramatic colour. If you require UV protection, we recommend DCC Urethanes for maximum performance.

## FEATURES & ADVANTAGES

- Superior colourfastness
- Excellent adhesion/inter-coat adhesion
- Extreme abrasion resistance
- High durability
- Excellent water & chemical resistance
- Extraordinary resilience
- Retards growth of mould, fungus, mildew and bacteria
- Excellent wear and tear resistance
- Solvent free
- Easy to apply, clean & maintain

## RECOMMENDED USE

- For High-end Decorative finishes
- Metallic Epoxy Floors
- Hallways, Corridors & Hospitals
- Designer Floors
- Showrooms, Garages and Workshops
- Lobbies, Lounges, Nightclubs & Foyers
- Salons, Retail Stores and Wineries
- Shopping Centres and Retail Flooring
- Museums, Office Buildings & Galleries
- Restaurants & Art Centres
- Boutiques, Countertops & more...

## TECHINICAL DATA & CHARACTERISTICS

APPEARANCE	Liquid
COLOUR	Clear
VOLUME SOLIDS	100 %
FINISH	Gloss
COVERAGE	1 – 1.25m <sup>2</sup> for metallic designer floors, normal floors 6 – 10m <sup>2</sup>
MIX RATIO	2 : 1 (2 Parts A to 1 Part B)
PACK SIZES	12L Kit / 8L Metallic Art Epoxy EP100® Part A, 4L Hardener Part B
SPECIFIC GRAVITY	Part A 1.12 kg/l   Part B 1.0 kg/l
POT LIFE	25 – 60 minutes
DRYING TIME	4 – 12 hours @ 25°C - slow cure to achieve natural natural stone appearance
RECOAT TIME	12 – 24 hours @ 25°C
FULL CURE	7 days @ 25°C
SHELF LIFE	12 months, if properly stored in original unopened containers at temperatures between 10° C and 30°C, away from sunlight.

\* The pot life time depends on climatic conditions and temperatures.

\*\* Drying times generally depend on air circulation, temperature, film thickness, and application methods.  
The figures given above are typical with good ventilation, typical film thickness and single coat application.

## SURFACE PREPERATION

All surface preparation has to be carried out to Australian Standard or International Standard. New concrete must be cured for a minimum of 28 days before a coating.

Concrete moisture test should be carried out prior coating application as per Standard ASTM4263 and/ or International Standard. The moisture content should be less than 4%.

Surface to be treated must be structurally sound and the substrate compressive strength should be at least 25MPa. All non-structural cracks, holes and surface deformities should be repaired.

In general, the surface to be treated **MUST** be clean and free of all traces of loose material, dirt, debris, mildew, oil, grease, old coatings, curing compounds, release agents, laitance, dust and other contaminants.

All new or old concrete surfaces should be prepared by mechanical grinding, abrasive blasting, blast-tracking, or any other suitable preparation/cleaning methods. Check if all traces of oil and other contaminations has been completely removed. Sprinkle a few water drops over the surface, if all water is quickly absorbed, the surface is sufficiently oil and grease free. If the water beads up, even in certain areas only, further preparation/cleaning has to be carried out.

For more detailed information, see following standard codes of practice, guides and techniques:

ASTM D4258 Standard practice for surface cleaning concrete for coating

ASTM D4259 Practice for abrading concrete

ASTM D4260 Practice for liquid and gelled acid etching of concrete

ASTM D4262 Test method for pH of chemically cleaned or etched concrete surfaces

ASTM D4263 Test method indicating moisture in concrete by the plastic sheet method

ASTM D4285 Test method for indicating oil or water compresses air

## APPLICATION & GUIDELINES

### Mixing

Mix Metallic Art Epoxy EP100® (2 Parts A) with Metallic Art Epoxy EP100® Hardener (1 Part B). The mix ratio is 2:1. Always add Part B into Part A and make sure you add Part B slowly while mixing Part A. Use a mechanical mixer to ensure thorough mixing and avoid aeration when mixing the product. Use a lint free epoxy roller to apply the product. Always mix full pack sizes to avoid incorrect measure of ratio.

### Metallic Colour Pigments™ Tint Packs

Mix Metallic Colour Pigments™ with Metallic Art Epoxy EP100® Part A only. Assure Metallic Tint Pack is properly emptied. Use a mechanical mixer to distribute the pigments properly and ensure thorough mixing. Avoid aeration when mixing the product, mix for 10 minutes and leave for 20 minutes to allow any aeration to dissipate. Do NOT mix Metallic Colour Pigments™ at the same time with Part A and Part B of two pack systems. Always add Part B later after Metallic Tint Pack™ has been fully dispersed and any aeration has disappeared. It is recommended to mix Metallic Colour Pigments™ into Metallic Art Epoxy EP100® Part A at least 24 hours prior to application.

### Application

Always prime surface before the basecoat and main coat to prevent pin holing and to minimise sink-back of material. An opaque pigmented basecoat MUST be applied prior the main metallic epoxy coat. Prime coat with approximately 6-10m<sup>2</sup>/L depending on substrate, check for pinholes and do a 2<sup>nd</sup> prime coat if necessary.

If thinning is required, you can add 5% Solvent SLP100™. Discard all leftover material. Do NOT pour mixed unused material back into the original container as this will start the whole material to react and cure within the drum.

One metallic epoxy main coat only to apply. The recommended application rate of Metallic Art Epoxy EP100® is minimum 1.0L per 1.0 - 1.25m<sup>2</sup>. This thickness will ensure the Metallic Art Epoxy EP100® work their magic. Once the Metallic Art Epoxy EP100® is applied, the pigments start to move and create their patina. Use a magic squeegee and lint free epoxy roller, or a trowel to apply the product. For UV protection we recommend DCC Urethanes for maximum performance. Different appearances can be achieved with Gloss, Satin or Matt finish Urethanes.

### Curing Times

Pot Life: 25-60 minutes, Touch Dry: 8-14 hours, Hard Dry: 16-24 hours, Full Cure: 7 days.

Allow coating to cure for at least 24 hours before subjecting to light pedestrian traffic and at least 7 days for full cure and vehicular traffic. The pot life time depends on climatic conditions and temperatures. All drying times depend on film thickness, ventilation, temperature, humidity and application methods.

### Cleaning

Clean all equipment immediately after use with Solvent SLP100™.

### Coating Maintenance

In general dirt, dust, contaminants, and excessive wear and tear will shorten the life of coating. Keep these areas clean and free from such pollutants and avoid excessive wear and tear. Clean coating regular with warm mild detergent water up to 60°C and rinse with clean water. Do not use abrasive brushes, scouring pads or solvent to clean the coated surface. It is advisable if abnormal wear and tear will occur through moving furniture such as office chairs, keep these areas protected with a protective mat. Further to the above cleaning recommendations please ensure immediate cleaning of any spills. Refer to DCC Maintenance & Cleaning Guide for detailed information.

### Compatibility & Suitability

Do NOT mix this product or use this product in combination with any other products or brands. Due to the differences in substrates, material and site conditions, and environmental surrounds, the applicator holds whole responsibility for checking the products suitability for its intended purpose prior application. Only products of the same brand/system should be used in combination as a system.

## PRECAUTIONS

Safety Data Sheet and Technical Data Sheet must be read before using and opening this product. Keep out of reach of children. Always wear personnel protective equipment (PPE) when handling this product. Keep away from heat and flame. No smoking. Provide adequate ventilation. For more details refer to safety data sheet (SDS).

Do not apply if the air or surface temperature is below 10°C, or if the temperatures are subject to drop below 10°C during applying, or after application within the curing time.

Product will discolour on exterior exposure.

Do not apply if substrate is subject to hydrostatic pressure or rising dampness.

Do not apply if surface is subjected to unusual high temperatures above ambient temperature.

Do not apply if the surface temperature is over 30°C, or if the surface temperature is subject to raise above 30°C during applying, or after application within the curing time, or if relative humidity is suspected to become above 85%.

Do not apply if substrate is subject to rain or moisture, and protect surface at least 24 hours against any water impact, or moisture after application within the curing time. Do not use any product past its pot life. Store locked up, in a cool, dry, well ventilated place, away from sunlight, between 10°C and 30°C. Keep container tightly closed.

## DISCLAIMER

Do not apply this product if there is uncertainty about application or surface preparation. This Technical Data Sheet is to be used as a guide only; it is NOT a specification. Durable Concrete Coatings Pty Ltd has no control over the use or storage of this product and therefore does not accept liability in this regard. Any verbal advice given should not be regarded as authoritative information. This information is subject to change without notice, therefore all applicators should ensure they have current information. This product is intended for the use only of skilled tradesman and where applicable, statutory licensed tradesmen experienced and trained in the use of this product. Due to differences in substrates, application methods and local conditions purchasers of these products must ensure that it is suitable for their specific application before using these products. While the information contained in the TDS and SDS is accurate to the best of our knowledge, Durable Concrete Coatings Pty Ltd cannot guarantee that the information contained is wholly comprehensive. Subject to the provisions of the Trade Practices Act, the Company's liability in relation to defective product shall be limited to replacement of the product, proving the product to be defective. Durable Concrete Coatings Pty Ltd all terms and conditions apply.

Durable Concrete Coatings Pty Ltd | 2/100 Kingston Road, Underwood

QLD 4119 Australia

Landline (07) 3808 2769 | Australia Wide 1300 800 054

[info@durableconcretecoatings.com.au](mailto:info@durableconcretecoatings.com.au) | [www.durableconcretecoatings.com.au](http://www.durableconcretecoatings.com.au)