

EPO-Base SL100

EPO-Base SL100 is a 100% solids epoxy system designed for civil and construction industries. It is a solvent-free, low viscosity system that is suitable for concrete, metal and timber.

It may be filled with sand and other fillers to form a super strong repair mortar, render or grout. With the addition of suitable coloured oxides it can also be used for non-slip, flake and high durable flooring.

EPO-Base SL100 is a simple 2:1 mix ratio and relatively fast thin-film cure of 3.5 hours, making it an industry favourite. It can be applied with a brush, roller or an airless spray.



INTENDED USES

- HEAVY DUTY FLOORING
- DECORATIVE FLOORING
- INTERNAL FLAKE FLOORING
- UNIVERSITY FLOORING
- HOSPITAL FLOORING
- COMMERCIAL WAREHOUSE OR FACTORY FLOORING
- RESIDENTIAL GARAGE FLOORING

ADVANTAGES / FEATURES

- Simple 2:1 mix ratio by volume
- Fast thin film cure of 5 hours
- Blush-free, clear finish
- Available in a wide range of colours AS2700
- Good chemical and oil resistance
- Low mixed viscosity of 240CPs penetrates concrete and is easy to roll and spray.
- Zero VOCs – no odour or fumes during application
- Eco enviro friendly product

LIMITATIONS

- Gel time and thin-film dry times are heavily dependent on temperature, humidity and film thickness.
- Thick films will take longer to cure. High humidity and temperature will shorten thin film cure times.
- Not to be used as a UV blocker to prevent discolouration of non-colourfast products underneath. The only way to ensure colour fastness of product underneath is to use a coloured ASP.
- Mix smaller batches in extreme conditions. Test the gel time and thin-film cure times before commencing a large job. Stop application 5 minutes before the product gels in order to minimise air-bubble entrapment.

PRODUCT INFORMATION

Volume Solids	100%
Theoretical Coverage	5 Square Metres / Litre at 200 Microns DFT
Finish	Clear Liquid
Colour	Clear Finish & AS2700 available
Gloss	Glossy
Mixing Ratio	2:1 by volume
Pot Life	30 min @ 25°C
Typical Thickness	200 Microns DFT (100 to 750 microns WFT)
Cleaner	Xylene
Flash Point	>150°C Method: Closed Cup
VOC	0 Grams / Litre
Specific Gravity	1.15 – 1.30

CURE & RECOAT TIMES

Substrate Temp	Tacked	Hard Dry	Full Cure (Note 1)	Minimum Recoat Time	Maximum Recoat Time (Note 2)
5°C	24 Hrs	36 Hrs		36 Hrs	12 Days
10°C	12 Hrs	18 Hrs		18 Hrs	6 Days
15°C	8 Hrs	12 Hrs		12 Hrs	4 Days
25°C	3 Hrs	4 Hrs	5 Hrs	7 – 12 Hrs	2 Days
40°C	1.5 Hrs	2 Hrs		2 Hrs	1 Day

Note 1: Pull-off adhesion testing is best conducted after 3 Days plus at ambient cure

Note 2: Where the coating is exposed to direct sun and UV, the maximum recoat time will be considerably reduced. Contact LuxCoat for advice

POT LIFE INFORMATION

Mixed Product Temperature	Pot Life (Note 1)
10°C	90 min
15°C	60 min
25°C	30 min
40°C	10 min

Note 1: Pot life is dependent on product temperature as well as mix size. When using larger mix sizes, the pot life will be shorter. Keep products cool

ENGINEERING DATA

Property	Test Method	Results
Dry Heat Resistance		100°C
Abrasion Resistance	ASTM c501-84, 518 Wheel @ 1,000 rpm with 1,000g weight	98°C

SURFACE PREPARATIONS

Concrete Surface Application

The concrete surface preparation must be conducted under the SSPC-SP13/NACE No. 6 surface preparation standard for concrete. This standard covers the preparation of concrete surfaces before the application of protective coating or lining systems.

The concrete should be at least 28 days old. Ensure that the moisture content of the concrete is less than 7% before applying any coatings. A moisture test as outlined in ASTM D4263 can be used to confirm the moisture content.

- Remove all oil, grease and release agents in the concrete. Ensure that any laitance or other invisible contaminants have been removed. Be especially careful with concrete surfaces that have been in contact with form ply or moulds that may contain release agents. These release agents commonly contain heavy hydrocarbon waxes or silicones that can adversely affect the adhesion.

Contaminant may also be present below the surface as it may have penetrated the concrete. This can be the case in food processing facilities for example. Depending on the depth of the contaminant this may require solvent and /or hot water high pressure cleaning.

- Prepare the concrete surface to a clean, dry finish through ensuring that the water and air used in the decontamination of the concrete is clean.
- Fill bug holes with EPO-Prime LV making sure to fill all pores and holes.

Steel Surface Application

- Remove all rust, mill scale, oil and any previously applied coatings back to bare clean steel using abrasive blast. Welds should have slag and spatter fully removed.
- For permanent immersion remove any soluble salts on the steel surfaces.
- Once clean and dust-free follow 'Application Guidelines'.

Timber Surface Application

- Prepare timber surfaces to a clean, dry and sound finish. Ensure that any surface contamination is removed. Now follow 'Application Guidelines'.

Other Substrates Application

- EPO-Base SL100 adheres strongly to most well prepared surfaces.

APPLICATION GUIDELINES

Mixing Procedure

Always stir EPO-Base SL100 (Coloured pigmented) and EPO-Base SL100 - Part B (Clear) in its original container well before use.

Mechanically mix (by volume) 1 Part of EPO-Base SL100 - Part A with 1 Part of EPO-Base SL100 - Part B hardener (2:1). Do not vary from this ratio. EPO-Base SL100 is supplied in pre-measured containers, make up the entire mix. Do not attempt to part mix. Do not mix too much at once.

Avoid entrapping air during mixing. On large areas, pour the mixed product directly onto the substrate and then roll it in.

Equipment

Roller (preferred):	Suitable
Airless 60:1 pump:	Tip Range 21-26 Thou (0.53mm - 0.66mm). Output fluid pressure at spray tip not less than 3000 PSI (210 kg/cm ²)
Brush:	Suitable
Alternative application:	Plural component equipment from Graco that automatically meters and mixes EPO-Base SL100 such as Graco XM or Graco XP.
Temperature of material at gun:	Ambient (20°C - 30°C)

Environment

Relative Humidity:	The relative humidity must be less than 85%
Dew Point:	The substrate temperature must be at least 3°C higher than the dew point temperature
Substrate Temperature:	Do not apply if the substrate temperature is less than 3°C above the dew point

Thinning

Thinning of EPO-Base SL100 is not considered necessary or desirable. However, where deep penetration is required, Xylene may be added to a maximum of 10% of mixed resin and hardener. Often the first coat of EPO-Base SL100 is thinned thereby allowing it to penetrate deep into the substrate. The final coat should always be diluted.

Clean Up

Xylene may be used for general clean-up of equipment and hoses. To remove cured material from metal parts, soak in NeuraSol. Keep all gun part A side components in soak containers on the left side of the work bench and all part B side components on the right side of the work bench. The use of plastic soak containers with clip- on lids and removable baskets makes the job easier. Replace the NeuraSol regularly as soon as it starts turning cloudy and dirty.

Concrete Application Procedure

Apply one coat of EPO-Base SL100 to seal the concrete. For best results apply EPO-Base SL100 in the evening when the concrete is cooling down and not outgassing. The EPO-Base SL100 can be applied as soon as the sealer coat of EPO-Base SL100 has tacked or the following morning when the EPO-Base SL100 has cured.

Depending on the quality and porosity of the concrete a second coat of EPO-Base SL100 may be required to minimise pin-holing in the second coat of EPO-Base SL100. Avoid applying too much EPO-Base SL100 to the point where it ponds. If this happens spread the excess out with a roller to other areas. It is important to maintain the profile of the concrete. Then apply the EPO-Base SL100 with a suitable paint roller or spray using Airless 60:1 single leg equipment or plural spray equipment such as Graco XM or XP.

TYPICAL SYSTEMS

Substrate	Environment	Substrate Prep	Coat	System	DFT
Concrete	Flooring Light Duty	Diamond Grind	1 st Coat	EPO-Base SL100	250µ
			2 nd Coat	EPO-Base SL100	150µ
Concrete	Flooring Heavy Duty	Diamond Grind	1 st Coat	EPO-Base SL100	250µ
			2 nd Coat	EPO-Base SL100	150µ
			3 rd Coat	EPO-Base SL100	150µ

PACK SIZE

15L Kits:	10L of EPO-Base SL100 – Part A in a 20L Container 5L of EPO-Base SL100 – Part B in a 5L Container
30L Kits:	20L of EPO-Base SL100 – Part A in a 20L Container 10L of EPO-Base SL100 – Part B in a 10L Container

COMPATIBILITY INFORMATION

Primers:	EPO-Base SL100
Top Coats:	EPO-Base SL100

STORAGE AND HANDLING

Store in dry, shaded conditions away from sources of heat and ignition and in properly sealed containers. Protect from heat and frost.

A shelf life of 24 months minimum is typical if stored under ambient conditions at 25°C.

HEALTH AND SAFETY

EPO-Base SL100 is for professional use only.

This product should not be used without consulting the Safety Datasheet (SDS) as published on the LuxCoat or Floor and Flake website first.

Observe all health and safety as well as environmental legislation.

DISCLAIMER

The information contained herein is offered without charge and is for use by technically qualified personnel at their own risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and no warranty of any kind is made with respect thereto.