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DuroPoxy SLR100

Epoxy Based Durable Top-Coat Coloured Floor Coating

DESCRIPTION

DuroPoxy SLR100 is a solvent free, durable floor coating based on a hard wearing, two component epoxy resin system. The cured floor provides excellent resistance to chemical and mechanical damage. There is a semi-gloss surface finish for this product that is textured and durable. This product can be applied to a 400um profile; this can be achieved in two coats.

FEATURES

Kits – no onsite mixing errors

- 100% solvent free
- Extended working time
- Chemical resistance
- Bonds to damp surface
- Chemical resistant
- Non flammable
- Can be coloured – enhance the solution for client needs



USES

- Workshops
- Garage floors
- Factory floor
- Warehouses
- Shop floors

COMPONENT PROPERTIES

Property	Resin	Hardener
Appearance	Neutral Grey	Straw to amber colour liquid
Specific gravity g/cm ³	1.64 ± 0.05	1.06 ± 0.05
Viscosity @ 25°C	4,000 – 8,000 cps	100 – 300 cps

MIXING AND CURING CONDITIONS

Property	RESIN / HARDENER
Mix ratio by weight (resin/weight)	100/23
Solids Content	100%
Mixed specific gravity	1.57 gms/cm ³
Work Time (10L kit)	20 minutes @ 25°C
Recoat Time	Less than 12 hours @ 25°C
Ready for foot traffic	24 - 48 hours @25°C
Ready for vehicular traffic	48 – 72 hours @ @25°C

TYPICAL PHYSICAL PROPERTIES

Property	Method	RESIN / HARDENER
Hardness	AS/NZS 1683.15	63 Shore D
Tensile Strength	AS/NZS 1683.11	23MPa
Compressive Strength	ASTM D1621-04	67 MPa
% Elongation	AS/NZS 1683.11	6%

These values are typical properties and are not to be used for specification

APPLICATION

Surface Preparation: The surface must be clean, dry and free from loose particles, including dust, grease, coatings and curing compounds and other foreign matter. The substrate must be prepared by any way of degreasing, grinding or captive shot blasting to expose aggregate and provide a profile. Allow floor to dry if degreasing has been carried out.

DuroPoxy Primer 100 may be used to seal floor after cleaning or degreasing. Ensure floor is dry before applying the Duropoxy Primer 100.

Duropoxy Binder with an aggregate (**Durosand K5**) may be used to level surface irregularities. For further information on aggregate quantities, please refer to Duropoxy Binder datasheet.

The compressive strength of substrates shall not be less than 23MPa. A minimum direct tensile pull off is 1.5 MPa. The moisture content of substrate shall not be higher than 8% throughout and the temperature of the substrate must be 3°C above the current dew point.

Fill surface irregularities such as cracks, honeycombs with DuroPoxy aggregate system. Protect walls and columns against flashes using masking tape and polyethylene sheet.

Mixing: Prior to mixing, the temperature of the components must be between 10-30°C. All mixing should be done using a slow speed drill (300-600 rpm) and a spiral mixing paddle. Add the hardener to the resin and continue to mix for 1-2 minutes at 300- 600rpms.

Allow to stand for a minimum 5 minutes after stirring in cold weather (below 15°C or above 8°C). Ensure all the containers are empty before disposal. Allow to stand for 2 minutes at 25°C.

400um thickness can be achieved in two coats by applying and spreading with brush or roller...see coverage rates.

NOTE: Working time is approximately 20 minutes. This will vary depending on ambient conditions, quantity mixed and placed (see Dry and Curing times).

The following restrictions must be observed:

- Only apply the coating when the substrate temperature is at least 3°C above the dew point.
- Do not apply the coating if the substrate is below 5°C.
- Do not apply the coating if the substrate is wet or likely to become wet.
- Do not apply the coating if the weather is clearly deteriorating or unfavourable for application or curing.
- Do not apply coating in strong wind conditions.

DRY AND CURING TIME FOR SLR100

Substrate temperature	15 °C	25 °C	35 °C
Re- coat, minimum (hours)	24	12	8
Re- coat, maximum (hours)	48	24	24
Cured ready for foot traffic (hours)	48	24	24
Cured ready for full service (hours)	96	48	48

ESTIMATED COVERAGE

The consumption will depend upon substrate condition or type. Apply to give a coverage of Xm2 per litre a second prime coat may be required for porous substrate.

Recommended film thickness per coat (SLR100 is designed for 2 coats)

Film thickness and spread rate	Dry film thickness (um)	Wet film thickness (um)	Theoretical spread rate (m ² /L) per coat
Minimum	150	150	6.6
Recommended	200	200	5
Maximum	300	300	3.3

E.g. Coverage at 150um is 6.6m² per Litre per coat (2 coats required to give an approximate coverage of 3.3M² at 300um thick).

SLIP RESISTANCE

SLIP RESISTANT FINISH The following slip resistance rating was achieved by broadcasting *250gms of Durogrip aggregate per square metre of applied SLR100.

Test	Rating	Test Method
Dry Friction (COF)	D1 (with Durogrip)* COF < 0.4	AS 4586 (Appendix B)
Wet Pendulum Slip Rating (P0 - P5)	P5 (with Durogrip)*	AS 4586 (Appendix A)

PACKAGING AND COLOR AVAILABILITY

Duropoxy SLR100 is supplied as a 10L Kit (7.3L Resin / 2.7L Hardener).

Colours:

Red	Safety	Koala	Dark	Light	Neutral
Oxide	Yellow	Grey	Grey	Grey	Grey
					

STORAGE

Duropoxy SLR100 stored in its original sealed containers for up to 12 months in controlled environment. Place out of direct sunlight at temperatures between 15-30°C.

CLEANING

Clean the tools and equipment with rags, then wipe off using a solvent such as xylene before the resin system hardens.

HEALTH & SAFETY

Please observe the precautionary notices displayed on container. Use under well ventilated conditions. Avoid skin contact. Spillage on the skin should be removed immediately with suitable cleanser, soap and water. Eyes should be well flushed with water and seek medical attention immediately.

For the full health and safety hazard information and how to safely handle and use the product, please make sure you refer to relevant MSDS.

The information provided in this technical bulletin is as correct in detail as possible and is intended to give a fair description of the product and its capabilities. In practice, the substrate and environmental conditions vary widely, making it essential for the user to determine the products suitability for a particular application and that the product is not used beyond its physical limitations. The product is guaranteed providing that it is applied in accordance with the manufacturer's instructions as stated in this data sheet and any relevant Standard or Code, and provided that the building and installation is structurally sound. Durotech terms and conditions of sale apply.