



TWO PACK EPOXY MATRIX SL 5MM

DESCRIPTION

This Industrial epoxy flooring system is a 100% solids, two-pack cycloaliphatic amine cured epoxy resin matrix. USDA acceptable (for incidental contact) epoxy flooring resin designed as a stand-alone topcoat and as a binder for non-skid surfaces. It is non-blushing and non-water spotting, high gloss, self-levelling and colour stable.

Designed for use in a wide range of commercial environments where a lasting solution to floor maintenance problems is required. The exceptional resistance to a wide variety of chemical spillage and fumes makes this product ideal for use in high traffic commercial environments.

TYPICAL APPLICATIONS

- Pulp and paper mills
- Refineries
- Food processing plants
- Sewerage treatment plants
- Food processing industry
- Chemical/pharmaceutical industry
- Power stations
- Plastics industry
- Laboratories and rooms subject to radiation
- Clean rooms, exhibition halls and showrooms
- Demonstration areas and training rooms
- Washrooms, cloakrooms
- Wet and dry process areas i.e. Beverage industry, bottling plants, dairies, meat processing plant etc.
- Workshops and factories
- Warehouses, loading bays and ramps
- Hangers

FOR USE ON MINERAL-BASED SUBSTRATE SUCH AS:

- Concrete
- Mortar

ALLPURPOSE COATINGS



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Sumner Park QLD 4074

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- Stone
- Epoxy Modified Mortars

TDG CODES Hardener UN 1760

Compound Not Classified

FEATURES

- Tenacious bond to most substrates
- High mechanical properties
- Good abrasion resistance
- Good chemical resistance
- High durability
- Coloured
- Solvent free
- Joint less
- Easy and fast to apply
- Easily cleaned and maintained
- Waterproof
- Tile like finish
- Good chemical resistance
- High build application

GENERAL PROPERTIES

Manufacturer	Hexion (USA)
Solid content	100 % w/w
Work time per pack	0.5 hours
Tack free time	4hrs @ 25 degrees C
Typical film thickness	1-3mm
Finish	Gloss
Abrasion Resistance	Very Good
Tensile Strength	Up to 90MPa

TECHNICAL DATA SHEET



MIXING INSTRUCTIONS

Mix Part 'A' thoroughly using a power drill with paint mixing attachment.

Mix 3 parts 'A' with 1 part 'B'.

Mix thoroughly using a power drill with paint mixing attachment for 2 minutes, ensuring sides are well mixed.

Usable pot life is 30-45 minutes, depending on temperature.

PHYSICAL PROPERTIES

Compressive Strength:	ASTM D695 12,000 psi
Tensile Strength:	ASTM D638 3,900 psi
Elongation at Break:	ASTM D638 7.00%
Abrasion Resistance:	
CS-17 wheel, 1 kg load:	ASTM D4060 0.10gm loss
Water Absorption:	D570 0/07% (2 hour boil)
Flexural Strength:	ASTM D790 7,800 psi
Shore D Hardness:	ASTM D2240 89
Heat Distortion Temperature:	ASTM D649 50 deg.c
Bond Strength to Concrete:	100% Concrete failure

RESISTANCE TO CHEMICAL SPILLS (7 days at 25deg.C):

Ammonia Solution (20%)	Sodium Hydroxide (30%)
Sulphuric Acid (30%)	Kerosene
Lactic Acid (5%)	Aviation Fuels
Sodium Chloride (50%)	Petrol
Tannic Acid	Hydrochloric Acid (20%)
Acetic Acid (5%)	Toluene

SURFACE PREPARATION

Surfaces must be clean, dry and free from all traces of loose material, old coatings, curing compounds, release agents, laitance, oil and greases etc.



Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa and with moisture content below 4%.

Structurally unsound layers and surface contaminants must be removed. Substrates heavily impregnated with oil must be cleaned via a solvent cleaning methods. To check that all traces of oil have been completely removed, sprinkle a few drops of water over the surface. If all water is quickly absorbed, the surface is sufficiently oil and grease free. If water forms into globules that remain on the surface, further thorough treatment of the substrate is necessary.

When used as a self-levelling floor topping will not profile irregular substrates. For profiling defects on horizontal surfaces a suitable patching mortar is required. The patching mortar can be of epoxy or cementitious base depending on the scope, particular conditions and requirements of the work.

APPLICATION

First thoroughly stir the epoxy base to redistribute the pigment. If using more than one kit, compare the epoxy base (Part A) for colour matching. Base colours may vary slightly between different batches. If the colours are noticeably different, mix all the epoxy base containers together to obtain a uniform colour before mixing with the curing agent.

Mix EPO100 Coating Kit epoxy base (Part A) with the EPO100 Coating Kit curing agent (Part B). Use a mechanical mixer to ensure thorough mixing. The mixing ratio is 3/1 (base/curing agent) by volume. Make sure that both components are thoroughly mixed along sides and bottom of container. Unmixed components will result in 'hot spots' that will never cure. EPO100 Coating Kit does not require a 'sweat-in' or induction time and the mixed components should be used immediately.

HIGH BUILD

We recommend thinning the first coat with up to 30% Epoxy Thinners to ensure high penetration and adhesion. For high build flood coat, 2nd coat Roller, Brush or squeegee, 1mm product on floor per m² then broadcast chosen grade of agg to refusal. 3rd coat entrapment of Quartz.

Apply using a brush, or roller. Use a lint free epoxy roller to apply the product.

For a lightly textured finish, add 10 to 15% Ceramic SLG powder to the mixed epoxy. If a more non-skid surface is desired, broadcast the chosen grade of aggregate over the wet epoxy to 'refusal'. Allow the epoxy to rest for 12 hours and sweep off the excess aggregate. A topcoat of clear or pigmented epoxy is rolled over the exposed aggregate.



Note that exposure to sunlight and UV radiation can result in discolouration and slight chalking. This will have no adverse effect on the protective function of the coating. EPO100 Coating Kit can be top-coated with a UV absorber such as APC500F Urethane, this will prevent chalking and discoloration.

COVERAGE

1ST Coat Primer	M2
2nd Coat Flood	1Kg To 1.5Kg/M2
3rd Coat Entrapment	0.5Kg To 0.8Kg/M2 Depending on grade of Quartz sand used

COLOURS ARE PRODUCED AS CLOSE AS POSSIBLE TO PRODUCTION STANDARDS

- Where colour shade is critical, a site trial is strongly recommended prior to proceeding with the work.
- Ensure that finishing and application techniques remain consistent to prevent colour variations
- Note that some bright colours may require additional pigment packs to prevent opacity
- Under direct sun light there may be some discolouration and colour variation; this has no influence on the function and performance of the coating.

INTERCOAT ADHESION

Re-coat within 48 hours without needing abrasion.

TDG Codes	Hardener	UN 1760
	Compound	UN 1993

IMPORTANT NOTICE:

Read the MSDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact the Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

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PRODUCT DISCLAIMER:

This Technical Data Sheet (TDS) summarises to the best of our knowledge the product, including how to use and apply the product based on the information available at the time.

You should read this TDS carefully and consider the information in the context of how you will apply the product, including if it is being used in conjunction with any other products, the type of surfaces and the manner in which the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. All Purpose Coatings does not accept any liability either directly or indirectly for any losses suffered that arises from the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

TECHNICAL DATA SHEET