MULTIPURPOSE COATING
epigen 2816

epigen
Performance Resins & Composite Systems

TECHNICAL BULLETIN

A multipurpose, solventless epoxy system designed to meet the highest standards of colour retention, chalk resistance, and abrasion resistance. A coating preferred by general industry in applications such as concrete, timber, and steel coating of factories, warehouses, workshops, for a variety of services.

The surface finish may be laid as a thin film roll down coating controlling the thickness of the coating by the addition of Diluent. Safety flooring may be completed with the inclusion of aggregate to introduce a non slip profiled finish. For very light non slip surface finishes, Epigen Non Slip Additive is recommended.

TYPICAL APPLICATIONS

Vehicle Workshops	Swimming Pools
Pharamaceutical Industries	Amenity Blocks
Food Processing Facilities	Dairy Industries
Warehouse Flooring	Loading Docks
Laundries	Steelwork Coating

FEATURES

Excellent UV stability and chemical resistance
Application DFT from 50 micron to 3mm in 1 coat
Trafficable in 24 hours
Free of all solvents - zero VOC
Engineered for high mechanical strength
Versatility in application
Cures under cold adverse conditions
Easily transformed into a highly non slip finish
Non Slip finish can be coarse or fine
Colours available extend to all Australian Standards listed

Epigen 2816 is supplied as a three part kit comprising component “A” resin, component “B” curative, and pigment pack.
The entire kit is supplied in a pre weighed convenient size to make on site activities easier.

The Australian Standard 2700 colour standard is used as the basis colour chart for all colour selections. Product can be tinted in batch lots or on an individual kit by kit basis. Extensive work has shown that kit to kit tinting exhibits minimal variation in colour.

PROFILE

Ratio by weight	2.7 kg Component “A”
	1.8 kg Component “B”
	1.2 kg Pigment Pot
Pot Life minutes @ 24°C	45
Mixed consistency @ 24°C	Flowable Liquid
Specific gravity when mixed	1.4
Kg/m^2 for 200 micron low profile	0.28
Kg/m^2 for 2.5mm nonslip	0.9

TYPICAL CURED PROPERTIES

Compressive strength ASTM D695, Mpa	>90
Tensile strength ASTM D638, Mpa	>15
Flexural strength ASTM D790, Mpa	>15
Hardness, Shore D	88
Thermal conductivity ASTM C177, Kcal/m.hr° C	0.40
Coefficient of thermal expansion ASTM C531 (cm/cm/° C) x 10^{-5}	3.8
Dielectric constant ASTM D150 (150KHz)	3.0
Maximum exposure temperature, °C	150
Heat deflection temperature ASTM D648, °C	80
Cure time to light traffic @ 20° C, Hours	8
Cure time to open traffic @ 20° C, Hours	24
Ultimate cure time @ 20° C, Hours	72

This information is supplied as an indicative reference only. Caution should be used where direct comparisons are to be made.

MULTIPURPOSE COATING
epigen 2816

SURFACE PREPARATION

Methods for substrate preparation include using chemical means such as washing & etching, high pressure water blasting, or mechanical techniques such as abrasive blasting, grinding or scarifying.
Specialist advice is available from Peerless Industrial Systems to ensure the correct preparation procedure is employed for specific applications.

APPLICATION

Mixing of product should be carried out using slow speed mixers and completed by adding to the component "A", the colour pack followed by component "B". Ensure the mix is homogenus and free from lumps.
Pour the mixed product directly into paint trays and using a medium nap roller, apply the product directly to the substrate ensuring the product is finished off evenly, removing excess puddles or trails.
In thin coat applications of 100 micron, Epigen Diluent may be added at a rate of up to 20% to provide the desired consistency.

NON SLIP FINISH

To complete the floor with a profiled safe trafficable finish, broadcast graded sand aggregate, nominally 16/30 mesh, over the entire product within 30 minutes of rolling down the area. Ensure the product is totally blinded out by the sand.
Leave the product to cure for 8-12 hours before carefully sweeping away all loose unbound sand.
Apply a final thin coat of Epigen 2816 over the entire area to leave the floor with an even appearance and all sand thoroughly sealed.

Should a fine non slip finish be preferred, Epigen Non Slip Additive should be added to the final coat. Some Diluentmay be added to maintain consistency and occasional stirring should take place to ensure the Additive does not settle out.

COVERAGE GUIDE

Application of 2 coats - Thin film (final DFT 200 micron)

Epigen 2816	1st coat 35 m^2 / 5.7 kg kit	
	2nd coat 40 m^2 / 5.7 kg kit	

If using Non Slip Additive, allow 35 m^2 / 5.7 kg kit in the 2nd coat

Non Slip Finish - R13 Type (nominally > 1.5mm)

Epigen 2816	1st coat	15-18 m^2 / 5.7 kg kit
16/30 mesh sand	1.5 kg / m^2	
Epigen 2816	2nd coat	8-12 m^2 / 5.7 kg kit

CHEMICAL RESISTANCE

Tested at 21°C. Samples cured for 10 days at 25°C.
Curing at elevated temperatures will improve chemical resistance.

1 = Continuous or long term immersion
2 = Short term immersion
3 = Splash and spills
4 = Avoid contact

Acetic Acid, 10 %	2	Acetone	2
Acetic Acid, Glacial	2	Ammonium Chloride	1
Hydrochloric Acid, 5 %	1	Beer	1
Hydrochloric Acid, 10 %	1	Dichloromethane	4
Hydrochloric Acid, conc	2	Diesel Fuel	1
Nitric Acid, 5 %	2	Isopropyl Alcohol	1
Nitric Acid, 10 %	3	Kerosene	1
Phosphoric Acid, 5 %	1	Petrol	1
Phosphoric Acid, 20 %	2	Salt Water	1
Sulfuric Acid, 5 %	2	Sewage	1
Sulfuric Acid, 20 %	3	Skydrol	1
Ammonium Hydroxide, 5 %	1	Sodium Cyanide	1
Ammonium Hydroxide, 20 %	1	Sodium Hypochlorite	1
Potassium Hydroxide, 5 %	1	Toluene	2
Potassium Hydroxide, 20 %	1	Trichloroethane	2
Sodium Hydroxide, 5 %	1	Wine	1
Sodium Hydroxide, 20 %	1	Xylene	1

This information is supplied as an indicative reference only. Caution should be used where direct comparisons are to be made.

CURE

Variations in cure may arise due to the amount of material being applied, the thickness of material being applied, the surface temperature, and the product temperature. The cure may be increased by heating product or by leaving mixed material stand for 15 minutes before use. The cure may be decreased by cooling the product before mixing.

EPIGEN **PRODUCTS**
MANUFACTURED BY
Peerless Industrial Systems Pty Ltd

ABN 14 097 615 391
79 Robinson Ave, Belmont, WA 6104
PO Box 407, Cloverdale, WA 6985
Phone: (08) 9477 3788 Fax: (08) 9477 3766
Email: service@peerlessindustrial.com
www.peerlessindustrialsystems.com
www.epigen.com.au

2816:2003/Nov
rev8,2011/Sept