

HIGH BUILD EPOXY LINING

epigen 1344

A solventless, high build protective coating, designed specifically for use in potable water applications to combat corrosion in tanks, wells, structural members and fluid transfer systems. It is an ambient temperature curing product with suitability in low application temperature environments, curing to form a tough, semi-flexible lining, adhering strongly to suitably prepared metal, wood and concrete surfaces

Suitable for use in the water industry in Potable Water applications, this high performance, epoxy polymer lining is resistant to sea water, dilute mineral acids and alkalis, hydrocarbons, oil and fuel, and is suitable in applications where fine particulate matter may be present

1344 is primarily a barrier lining for the treatment of steel, concrete or brick.

TYPICAL APPLICATIONS

Water Storage Tanks	Pipelines & Valves
Ducting Systems	Cooling Towers
Process Tanks & Vessels	Drinking Water Systems

FEATURES

- Highly erosion resistant filler within polymer system
- Application DFT up to 1000 micron in the one coat
- Free of all solvents - zero VOC
- Engineered for high mechanical strength
- Versatility in application - can be used with GF
- Cures to Potable Water Standards at low temperature

POTABLE WATER SUITABILITY

Assessed to AS/NZS4020:1999 "PRODUCTS FOR USE IN CONTACT WITH DRINKING WATER"

Passed all requirements at:

- | | | |
|----|------------|---------------------------------|
| a/ | 20°C cure | 45,000mm ² per litre |
| b/ | 6-8°C cure | 45,000mm ² per litre |

Re-assessed in 2005 to AS/NZS4020:2002 "PRODUCTS FOR USE IN CONTACT WITH DRINKING WATER"

Passed all requirements at 45,000mm² per litre

Assessed to PUB (Singapore) requirement for TOC content less than 10ppb - Test Report PSB Singapore S08CHM00781 - EO



PROFILE

Ratio by weight	2 parts "A" to 1 part "B"
Pot Life minutes @ 24°C	60
Mixed consistency @ 24°C	Flowable Liquid
Specific gravity when mixed	1.4
Kg/m ² for 500 micron	0.7
Tack free time @ 24°C	240 minutes

TYPICAL CURED PROPERTIES

Compressive strength ASTM D695, Mpa	>90
Tensile strength ASTM D638, Mpa	>22
Flexural strength ASTM D790, Mpa	>50
Hardness, Shore D	78
Dielectric constant ASTM D150 (150KHz)	3.0
Maximum exposure temperature, °C	110
Heat deflection temperature ASTM D648, °C	65
Thin Film Gel, (min recoat time) Minutes	120
Maximum recoat time, Hours	48
Ultimate cure time to Service, Hours	120

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

SURFACE PREPARATION

Methods for substrate preparation may include abrasive blasting, high pressure water blasting, chemical means such as etching or pickling, or hand tool methods.

Every effort should be maintained in selecting a technique that provides satisfactory adhesion for the lining in the given service.

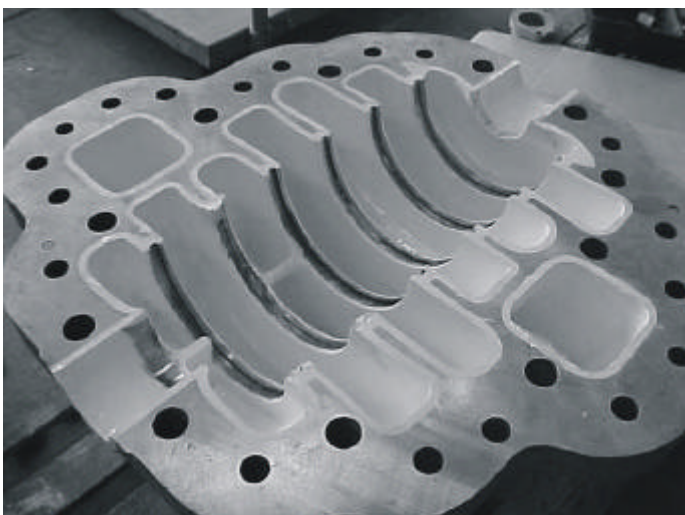
Specialist advice is available to ensure correct preparation procedure is employed for specific applications.

APPLICATION

Mixing of product should be carried out using slow speed mixers and completed by adding to the part "A", the part "B". Ensure the mix is homogenous and free from lumps. Avoid air entrainment.

Epigen 1344 can be applied either by airless spray, brush or roller. Since it does not contain solvents, application by spray allows the application of high film thicknesses in single coats, and ensures minimal issues with solvent entrapment or shrinkage.

Epigen 1344 is of higher viscosity than conventional solvent containing coatings and application may require more specialised practices but is generally compensated for by the speed of application and need to apply fewer coats.



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 %	1	Acetone	2
Acetic Acid, Glacial	2	Ammonium Chloride	1
Hydrochloric Acid, 5 %	1	Beer	1
Hydrochloric Acid, 10 %	1	Dichloromethane	2
Hydrochloric Acid, conc	2	Diesel Fuel	1
Nitric Acid, 5 %	1	Isopropyl Alcohol	2
Nitric Acid, 10 %	1	Kerosene	1
Phosphoric Acid, 5 %	1	Petrol	2
Phosphoric Acid, 20 %	1	Salt Water	1
Sulfuric Acid, 5 %	1	Sewage	1
Sulfuric Acid, 20 %	1	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	2

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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

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