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Epigen Epoxy Resins...

handling today's needs with tomorrow's technology...

Peerless since 1947, Epigen since 1970.

The products have provided trusted performance for a variety of applications in the mining, construction and general industrial related fields.

Incorporating such diverse materials which include:

- Adhesives
- Coatings
- · Patching Compounds and
- · Maintenance Products

Epigen has remained at the forefront of epoxy technology with superior quality, development and service that adds up to the most reliable choice you can make

This brochure does not cover the full extent of the Epigen products, but provides a guide to many of the products manufactured under the Epigen name.



XD005

301 0 6 9

A medium viscosity high strength grout, primarily developed for use as a crusher backing compound. Rapid achievement of high performance cured properties make it exceptional for a myriad of tasks including bedding of machinery & equipment, chemical anchor, heavy duty floor repairs, or in the repair of rail foundations or adhesive applications.

301CG **0 9**

Cartridge Grade 301 is a twin cartridge, plural head mix package for use with a pneumatic powered gun for ease of dispensing. Load the package into the gun, attach the air line and pull the trigger. Prepared for grouting anchor bolts in construction, uses extend to grouting rails and equipment, securing undersea cables and anchors, and general bonding of steel and timber.

301MRD **69**

A grade especially formulated with Main Roads Department for use in wrap and pour applications when rebuilding timber bridge piles. Subsequent use includes rebuilding and providing corrosion protection to steel and concrete piles, high flow bedding of structural steel, and bridges.

402 0 9 9

One of the most versatile products on the range for general purpose applications, its multipurpose features allow use in sealing concrete and timber, priming substrates prior to application of subsequent materials, fibreglass lamination. Able to be bulked with sand or other aggregates, grouting, concrete resurfacing, swimming pool surrounds, bund walls fairing or repairing cracks.

405 **89**

Excellent chemical resistance to a wide range of chemicals, this binder is generally filled with sand or other suitable aggregates to produce a mortar suitable for floor topping or concrete repair in process and food preparation areas, pharmaceutical facilities, and water treatment installations.

411 00

A unique flexibilized epoxy primer and binder which can be used as a base primer on rubber, metal or concrete, or as an adhesive to bond fiberglass, wood, fabric, steel or a variety of plastics. Based on epoxy and polyurethane technology, resilience is a key characteristic which makes it an ideal primer for elastomeric polyurethane applications.

503 **0 9**

Exceptional underwater cure properties in a paste consistency. The perfect solution for crack repair, patching or filling trouble spots underwater, in wet or dry zones on a myriad of marine structures such as piers and jetty, boat hulls, water tanks, and many more applications. Dry adhesive, patching & fairing applications may also be addressed on concrete, steel and timber.

Legend to Product Selection

Adhesives/Glues/Bonding

- designed for, or known to be suitable in bonding metals, plastics, timber, and a variety of other materials.

Abrasion Resistant/Ceramic/Metal Repair

- suitable for application to metal surfaces to reinstate or provide protection from abrasion and erosion.

S Flooring

- all products demonstrating suitability for use in coating, lining, or repair of concrete, steel, or timber floors.

4 Tank Linings/Continuous Immersion Service

- those products capable of lining equipment used in storage or conveying slurries, liquids and gases

Grouts/Load Bearing

- materials designed to support heavy equipment under static or dynamic load, and retain dimensional stability

6 Protective Coating/Atmospheric

- products suitable for coating equipment or structures from vapour and air-bourne degradation

Acid Protection/Secondary Containment

- designed for any service that possesses significant potential of degradation from very corrosive chemicals

8 High Temperature Service

- suitable for continuous service at temperatures beyond 80 Celsius

Binders/Patching/Repair

- miscellaneous products for general service including joint sealant, flexible primers, and reinforced repair paste



1311

806 2 4

A ceramic composite in trowellable format, the ceramic is specially graded to provide excellent smooth, low wear surfaces, for treatment of volutes, impellers, elbows, agitators, and cyclones either as a pretreatment to extend life or rebuilding or reclaiming equipment. Long pot life provides reasonable working time, especially in large applications.

806BR **24**

For use in applications where the ease of application by brush is preferential, a build of several millimetres can be easily achieved. Suitable for erosion and corrosion control, use on spiral clarifiers, agitator shafts, tanks, pumps and pipe lines, shaker tables and fans. Also approved for use in potable water.

806MG **24**

A fine grade ceramic composite in trowellable format enabling machining of flange faces, or correcting bearing tolerances in abrasive and erosive applications. The fine grade imparts low frictional drag making this product ideal on conveying equipment like screws and their housings.

806PR **24**

Pourable version of the traditional trowel grade, useful in spin lining of pipes subjected to abrasion, quickly casting wear resistance liners into elbows and other unique shapes, and the preparation of wear tiles or castings to install using epoxy adhesive.

907 0 6 9

A multipurpose high strength adhesive developed with particular attention to obtaining high compressive and tensile strengths. Its thixotropic consistency reduces sag and runs when applied to uneven or inclined surfaces. Applications include the bonding of ceramic wear tiles, wear plate, or timber and plastic to foreign surfaces. As an adhesive, excellent for use in timber or concrete applications, or as a stopping compound or chemical anchor.

1009 0 9 9

For application onto old concrete surfaces before pouring new concrete to improve bond strength and structural loading capability. Other applications include topping or leveling concrete, and crack repair using cut and pour or injection techniques is possible.



1311 46

A high solids high build epoxy coating that can be applied with a brush, roller or spray. Provides a smooth, hard wearing corrosion and chemical resistance lining on steel, concrete or timber. Typically used on sewage & waste water installations, potable water applications, processing equipment, wharfs, food processing installations, and storage tanks or railcars.

1344 4 6

High quality lining in potable water applications, this high solids high build epoxy coating that can be applied with a brush, roller or spray. Provides a smooth, hard wearing corrosion and chemical resistance lining on steel, concrete or timber. Also exhibits thorough low temperature cure with minimal effect on water quality, excellent flexibility and tolerant of surfaces less than ideally prepared.

1369 468

Potable water approved for hot or cold water, high build high solids features make it suitable for cooling towers, hot water storage systems, or simple process applications. Provides a smooth, hard wearing corrosion and chemical resistant lining on steel and concrete. Also used in lining duct work in scrubbers, exhausts and other moderately hot applications.

1412 40

Based on traditional coal tar epoxy compounds, the substitute coal tar is synthetic based offering improved health & safety features. Solvent free with high build features, the retention of flexibility adds to its adhesion over poorly prepared or hard to adhere to surfaces. Suitable for application over steel, concrete, or timber and many plastics. Also nominated as a primer over unstable or poor surfaces, with excellent resistance to water vapour permeability.

1513 **9**

A ready to use trowellable mortar for rebuilding and fairing damaged concrete surfaces. Moderate resistance to chemicals, it may be used as a base for more chemical resistant products or simply employed for overhead repairs. Recommended primarily for vertical and inverted surfaces, use in the processing industry and marine industry for concrete rehabilitation is a major use.

1614 0 9

Designed for jointing applications, this is designed as a pourable tough trafficable compound, yet still retains good flexibility and elongation. Services include high load joint sealing, water tanks, and in water or proofing car parks and warehouses. With excellent adhesive properties, use has extended to fairing warped steel decking prior to overcoating with other systems, adhering plastics to steel or concrete surfaces, and gasketing applications.



2614

1614P **0 9**

A putty version of the standard 1614, generally used in vertical applications or when a high degree of control is required. As a jointing material, it exhibits excellent toughness retaining flexibility and elongation. Adhesive properties coupled with thixotropic properties ensures good filling properties when used to bond unmatched surfaces or plastics.

1642 **9**

Designed for jointing applications subjected to excessive movement, this is a high modulus pourable compound, with significant flexibility and elongation. Services include high load joint sealing, waterproofing car parks and warehouses. With good adhesive properties, applications have extended to adhering plastics to steel or concrete surfaces, and gasketing applications.

2008 2

A multipurpose metal repair putty for use on a variety of ferrous and non ferrous metal including steel, aluminium, and stainless steel. Easily machined to precise tolerances, keyways, shafts, and bearing faces can be readily repaired or faired, then corrected to the required dimensions.

2109 89

A clear low viscosity solution sealer with exceptional penetrative properties for low profile sealing of concrete, brick and timber. Ideal for use in workshops, warehouses, and general floor treatments including domestic polishing or grinding instances. Applications also extend to use as a holding primer on freshly abrasive blasted surfaces, and hardening soft timbers.

2614 3

Designed as a medium duty non slip flooring system to be applied using the multicoat techniques, good abrasion and chemical resistance is characteristic of this system which is easily applied to large or small areas of flooring. Applications include dairies, food processing rooms, storage warehouses, vehicle service centres, amenity & shower facilities and general traffic zones.

2816 8 6

A multipurpose coating that is suitable for use either as a low profile coating with excellent hiding power, or by the multicoat technique to produce a safe non slip flooring. Available in a range of over 200 colours with low yellowing and good UV resistance, applications include dairies, food processing rooms, storage warehouses, vehicle service centres, amenity & shower facilities and general traffic zones.

2816CL **0 9 9**

A clear, low yellowing, UV resistant product, applications extend to sealing timber on art and furniture fittings, model encapsulation or moulding and concrete sealing. Also suitable for general fibreglass laminating applications, and in the manufacture of hard wearing tags or badges.

2917 **3**

High flow coupled with extremely good levelling properties, principal applications extend to use in flooring applications to produce a smooth high gloss finish that is extremely hygenic. Available in a range of over 200 colours with good UV resistance coupled with low yellowing, applications include pharmaceutical production facilities, showrooms, television studios, and other high demand installations.

3321 🛭 🖳

Formulated for heavy duty non skid flooring applications, it contains a synthetic replacement for coal tar to impart resiliency and resistance to cracking or chipping. With excellent crack bridging properties, adhesion to steel, concrete, or timber, even on less than ideally prepared surfaces allows retention of a stable integral finish. Application using the multicoat technique, aggregate selection dictates finish profile. Applications include deck coating on ships and drilling rigs, roadways and pedestrian bridges, stables and steel flooring or ramps.

3422 0 6 6 9

A high performance binder that exhibits high mechanical properties with respect to elongation, compression & flexural strength. Primarily developed to be bulked with aggregate for use as a bridge nosing compound, it is also used in the repair of expansion joints to handle heavy equipment, the redevelopment of concrete to achieve higher stress capabilities, and the bonding of brickwork and concrete to produce cyclone proof structures.



3523 2 4

A trowellable ceramic non sag putty that exhibits extremely high impact resistance in addition to superb abrasion resistance, it is very successful in addressing high impact and impingement abrasion. Applications include chutes, screens, volutes and general quarrying equipment subjected to the most extreme services. Cure time is rapid allowing for return to service very quickly after repair or installation.

3773 **24**

An easy to use, easy to build trowellable heavy duty ceramic that exhibits superior ease of use coupled to outstanding abrasion resistance for heavy duty abrasion applications. Applications include chutes, screens, volutes and general quarrying equipment subjected to the most extreme services. Cure time is very rapid allowing for return to service very quickly after repair or installation.

Specialty EPIGEN Products

Chemproof Series

4028 8 7

One of the first products released, and primarily used in trafficable flooring applications, it can be blended with aggregate to be applied by trowel though the prime manner of installation is by the multicoat technique. Also compatible to fibreglass laminating applications.

4028FC 90

Suited to cold temperature installation, or fast cure, demonstrates extremely high chemical resistance. Primarily used in trafficable flooring applications, it can be blended with aggregate to be applied by trowel though the prime manner of installation is by the multicoat technique. Also compatible to fibreglass laminating applications.

4029 467

A high solids high build coating that can be applied with a brush, roller or spray. Provides a smooth, hard wearing finish with application generally to non trafficable surfaces such as bund walls, tank bases and plinths, and structural steel or roofing.

4029FC 4000

A high solids high build coating suited to cold temperature installation, or fast cure, demonstrating extremely high chemical resistance. Can be applied with a brush, roller or spray. Provides a smooth, hard wearing finish with application generally to non trafficable surfaces such as bund walls, tank bases and plinths, and structural steel or roofing.

4030 40

A ready to use trowellable mortar for rebuilding and fairing damaged concrete surfaces. Recommended primarily for vertical and inverted surfaces, use enables concrete rehabilitation to be carried out swiftly and easily before finishing with another product.



2816

4040 8 7

A later development of 4028, this was developed especially for versatility in trowel or self leveling applications. The ease of use has become a hallmark of this product both in the quality of finish possible, and the speed by which work can be completed.

4040FC 90

Suited to cold temperature installation, or fast cure, demonstrates extremely high chemical resistance. Developed especially for versatility in trowel or self leveling applications. The ease of use has become a hallmark of this product both in the quality of finish possible and the speed by which work can be completed.

4055 🕄 🕝

Characterised by its resistance to Concentrated Nitric Acid, this is a specialty product that has its prime role in high concentrations of this very harsh acid. Application is primarily by trowel and self leveling techniques.

Fast Cure "FC" Series

FC1 **0 9 9**

Rapid cure and high adhesion developed with particular attention to obtaining high compressive and tensile strengths. Its thixotropic consistency reduces sag and runs when applied to uneven or inclined surfaces. Applications include the bonding of ceramic wear tiles, wear plate, or timber and plastic to foreign surfaces. As an adhesive, excellent for use in timber or concrete applications, or as a stopping compound or chemical anchor.

FC2 **24**

A ceramic composite in trowellable format, the ceramic is specially graded to provide excellent smooth, low wear surfaces, for treatment of volutes, impellers, elbow, agitators, and cyclones either as a pretreatment to extend life or rebuilding or reclaiming equipment. Rapid cure allows minimal cure time for fast return to service or use in colder climates.

FC3 **09**

Maintains exceptional properties due to the inclusion of chopped fibreglass, the ability to bridge gaps, as well as maintain a high degree of impact resistance provides unlimited applications in patching and repair of water pipes, tanks, slurry lines, pumps. Ideal for emergency repairs when time limits other corrective actions or replacement.

FC4 **0 9 9**

A medium viscosity high strength grout, primarily developed for use in small volumes, in cold climates, or when fast return to service is paramount. Rapid achievement of high performance cured properties make it exceptional for a myriad of tasks including bedding of machinery & equipment, chemical anchor, heavy duty floor repairs, or in the repair of rail foundations or adhesive applications.

High Temperature "XD" Series

XD001 **248**

A ceramic composite in trowellable format, the ceramic is specially graded to provide excellent smooth, low wear surfaces, for treatment of scrubbers, fans, elbows, exhaust systems, and ducting either as a pretreatment to extend life or rebuilding or reclaiming equipment. Nominal HDT of 150°C although service has extended beyond 240°C in certain applications.

XD001BR **248**

For use in applications where the ease of application by brush is preferential, a build of several millimetres can easily be achieved. Suitable for erosion and corrosion control, use on scrubbers, tanks, pumps and pipe lines, ducting and fans. Also used as an abrasion resistant adhesive to protect tile joints from erosive actions. Nominal HDT of 150°C.

XD001MG 248

A fine grade ceramic composite in trowellable format enabling machining of flange faces, or correcting bearing tolerances in abrasive and erosive applications. The fine grade imparts low frictional drag making this product ideal on conveying equipment like screws and their housings. Nominal HDT of 150°C.

XD001PR 238

Pourable version of the traditional trowel grade, useful in spin lining of pipes subjected to abrasion, quickly casting wear resistance liners into elbows and other unique shapes, and the preparation of wear tiles or castings to install using epoxy adhesive. Nominal HDT of 150°C.

XD003 **0 5 8 9**

A multipurpose high strength adhesive developed with a paste consistency to reduce sag and runs when applied to uneven or inclined surfaces. Applications include the bonding of ceramic wear tiles, or steel surfaces. Ensures good filling properties when used to bond unmatched surfaces or void filling castings. Nominal HDT of 150°C.





4028

XD004 **0 9**

A clear binder, essentially the backbone polymer of the XD series. Applications extend to moulding and general fibreglass laminating applications, priming substrates prior to application of subsequent materials, and making up specialty composites. Able to be bulked with sand or other aggregates, grouting, concrete resurfacing, or repairing cracks in concrete is possible. Nominal HDT of 150°C.

XD005 468

A high solids high build coating that can be applied with a brush, roller or spray. Provides a smooth, hard wearing finish with application generally to non trafficable surfaces such as tanks, ducting and process equipment such as pumps fans. Nominal HDT of 150°C although service has extended beyond 240°C in certain applications.

XD005SN 4668

High performance Novalac based high solids high build coating that can be applied with a brush, roller or spray. Provides a smooth, hard wearing finish with application generally to non trafficable surfaces such as tanks, ducting and process equipment such as pumps fans. Nominal HDT of 200°C with service potential up to 290°C in certain applications.

XD008 248

A ceramic composite in trowellable format, the ceramic is a fine grade specially to provide excellent smooth, low wear surfaces, for treatment of scrubbers, fans, elbows, exhaust systems, and ducting either as a pretreatment to extend life or rebuilding or reclaiming equipment. Nominal HDT of 125°C. Early peak cure makes this ideal when temperatures are not excessive and post curing is impractical.

XD008BR **248**

For use in applications where the ease of application by brush is preferential, a build of several millimetres can easily achieved. Suitable for erosion and corrosion control, use on scrubbers, tanks, pumps and pipe lines, ducting and fans. Also used as an abrasion resistant adhesive to protect tile joints from erosive actions. Nominal HDT of 125°C. Early peak cure makes this ideal when temperatures are not excessive and post curing is impractical.

XR367 Phoenix 88

A new generation composite compound that has been formulated to use all the advantages of epoxy polymer technology, with refractory properties. It exhibits none of the burning, smoking, fumes or other fire hazards associated with traditional materials. It can be used to treat a variety of new or damaged surfaces and components to improve or prolong their life under high heat normally associated with spillages of molten metals.

Supplementary EPIGEN Products

Boatex **09**

An epoxy laminating system specifically formulated to provide optimum performance under conventional use conditions. The basis of the system is one resin that can be used with either of two curatives. The curatives may be mixed to form a hybrid of the individual curatives to provide for a range of practical outcomes. Whether professional boatbuilders or industrialists are working with cored fibre composites, solid fabrication of heavy duty laminates, or simple repairs, it is suitable for use in simple room temperature cured fibreglass work or in post cured, carbon laminates where higher than normal properties are required.

CMT 09

This product is for use as a moulding resin system in the construction of rotational moulds. It is a resin for FRP fabrication and resurfacing. Nominal maximum service temperature of 290°C.

Diluent

A blend of solvents balanced to enable proper dilution as is required of some of the products in the range. Also is suitable for cleaning either as a gun wash or rinse aid.

T20P **9**

An emulsion based on poly functional oligomeric silane-siloxane compounds that penetrates, impregnates and chemically reacts with concrete and masonry to provide a water repellant surface. Ideal for treating floors, roof and floor tiles and pavers, bridges, marine structures, statues and buildings to lock out damaging water, salts and other contaminants. Practical protection against soil ingress, spalling and re bar corrosion by locking out water and harmful waterborne contaminants.



3321

Guide to Products

Adhesives/Glues/Bonding

301, 301CG, 402, 411, 503, 907, 1009, 1614, 1614P, 2816CL, 3422, Boatex, CMT, FC1, FC3, FC4, XD003, XD004

Abrasion Resistant/Ceramic/Metal Repair

806, 806BR, 806BR, 806MG, 2008, 3523, 3773, FC2, XD001, XD001BR, XD001MG, XD001PR, XD008, XD008BR

Flooring

402, 405, 1009, 2109, 2614, 2816, 2816CL, 2917, 3321, 3422, 4028, 4028FC, 4040, 4040FC, 4055, XR367 Phoenix

Tank Linings/ **Continuous Immersion Service**

806, 806BR, 806BR, 806MG, 1311, 1344, 1369, 1412, 3523, 3773, 4029, 4029FC, 4030, FC2, XD001, XD001BR, XD001MG, XD001PR, XD005, XD005SN, XD008, XD008BR

6 **Grouts/Load Bearing**

301, 301CG, 301MRD, 907, 3422, FC1, FC4, XD003

Protective Coating/Atmospheric

1311, 1344, 1369, 1412, 2816, 4029, 4029FC, XD005, XD005SN

7 **Acid Protection/Secondary Containment**

4028, 4028FC, 4029, 4029FC, 4030, 4040, 4040FC, 4055, XD005SN

8 **High Temperature Service**

1369, XD001, XD001BR, XD001MG, XD001PR, XD003, XD004, XD005, XD005SN, XD008, XD008BR, XR367 Phoenix

Binders/Patching/Repair

301, 301CG, 301MRD, 402, 402, 405, 411, 503, 907, 1009, 1513, 1614, 1614P, 1642, 2109, 2816CL, 3321, 3422, Boatex, CMT, FC1, FC3, FC4, T20P, XD003, XD004



806BR

About Us

Peerless Industrial Systems is an Australian company with key manufacturing facility in Perth, and corporate services in Melbourne. Core business is the manufacture and marketing a wide range of fully formulated, resin based polymer products under the Epigen tradename, since 1970.

Specialising in technical support of customers applications, key product focus groups include:

- chemical resistant coatings/toppings
- machinery grouts & backing compounds
- wear/abrasion resistant systems
- temperature resistant systems
- boat building systems
- tank linings
- floor coatings/toppings
- adhesives
- elastomeric linings & sealants
- metal repair

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Typical specialist applications include:

- acid (aggressive chemical) bund linings
- pump repair and rebuilding materials
- waste water treatment facility coatings
- process tank linings
- emergency repair
- crusher backing compounds
- potable water tank coatings
- non skid flooring
- turbine and motor chocking grouts
- joint sealants

Clients come from the Mining, Water & Power, Oil & Gas, Mineral Processing, Refining, Pipeline, Material Handling & storage industries.

Peerless Industrial Systems staff are dedicated professionals having technical expertise in Materials, Corrosion, Civil & Mechanical Engineering together with specialist Chemistry qualifications.

Commitment to research & development ensures a continuation to improve both products and support services.

Having earned the confidence from the industries it has been servicing for over 35 years, Peerless Industrial Systems is proud to be a leader in the development & provision of resin based technology.

Capability Statement

Research, design, manufacture, supply, and as part of an integrated package, backup to installation of the wide range of products ensures optimum progress through all stages of a project, from conception to completion.

The basis of the resin based technology initially centered on the use of Epoxy Resins to fulfil demanding industry requirements and has now been expanded to include Polyurethane & Acrylic Systems.

