

EPIGEN 4055

CHEMICAL RESISTANT FLOOR TOP - NAR

A CHEMPROOF 4000 SERIES PRODUCT

SPD -301
REV 1-0301

DESCRIPTION

Epigen 4055 has been developed as a multipurpose binder system, for the provision of a hard wearing surface that is resistant to the effects of corrosive chemicals. Primarily designed for use in Nitric Acid proofing of concrete and bunds, the performance of the *Epigen 4055* is equally satisfactory in the protection of structural steel work, pump bases and various other static fixtures in contact with corrosive chemicals. *Epigen 4055* compliments the existing Chemproof Series in flooring applications by providing unparalleled adhesion to a substrate by greater wetting power, together with effortless application by trowel, or as a self leveller, enabling large areas to be coated extremely quickly.

It is application enhanced.

FEATURES

- * Nitric Acid Resistance - One simple choice.
- * Non Flammable & No Volatiles - Health & Environment friendly.
- * Application Enhanced - Application and finish with relative ease.
- * Excellent Recoatability - Simple and easy protection and maintenance.

PERFORMANCE

Epigen 4055 was the result of extended trials with industry maintaining use of Nitric Acid on site together with professional contractors to maximise the ease and speed with which a protective coating may be applied. Substantial and ongoing assessment to a wide range of chemicals ensures extended knowledge of the products performance continues. *Epigen 4055* has been found to be suitable in splash and spill applications of all concentrations of Hydroxide Salts, Acids, including Sulfuric and Hydrochloric, as well as most petroleum and organic solvents. The emphasis is however on suitable protection of substrates against Nitric Acid, specifically up to 98% concentration with considerable contact time. Although *Epigen 4055* is not recommended for immersion service, it will maintain protection of underlying surfaces for several days in 56 – 98 % Nitric Acid.

The ***Chemproof 4000 Series*** perform extremely well under continuous immersion situations.

Confirmation of suitability, and advice on individual applications is available from the Manufacturer.

| Product Profile | Epigen 4055 Chemproof NAR |
|--------------------------|----------------------------------|
| Colour | Clear/Translucent |
| Consistency | Medium Viscosity Liquid |
| Pack Size | 4.8 kg, 24 kg, & Bulk |
| Mixing Ratio (by weight) | 10 parts A to 6 part B |
| Specific Gravity | 1.05 - 1.15 |
| Pot Life (25°C) | 30 minutes |
| Non Volatile Matter | 100% |
| Trafficable Cure Time | 8 - 14 hours |
| Ultimate Cure Time | 48 hours |

EPIGEN 4055 (Cont)

PREPARATION

Always ensure the surface to which Epigen is being applied is clean and free from all contaminants and loose matter. This may be achieved by many methods, including:-

1. Blasting
2. Scabbling
3. Chemical Treatments
4. High Pressure Water.

For further information regarding preparatory methods, consult "Preparation of Surfaces for use with Epigen Systems" or contact your Epigen Service Office.

MIXING ADVICE

Always ensure when mixing components that the prescribed mixing ratio is never varied. The mix shall be even in colour and homogenous in texture prior to use. It is recommended that mechanical stirrers be used. Store both components away from direct sunlight and away from heat since warm compound will reduce the pot life.

SAFETY

Protective gloves, coveralls and glasses should be worn when using epoxy resins and their curing agents.

If eye irritation occurs hold eye open and irrigate with water for 15 minutes and see a Doctor. Should skin contact occur wash contaminated areas with soap and water.

Avoid the use of solvents as a person cleaning aid. Contaminated clothes should be laundered before re-use. When working in confined or enclosed areas, introduce a source of ventilation (eg: exhaust fan).

Consult the product Material Safety Data Sheets for further information.

APPLICATION

Practical coating installation may be carried out using a variety of techniques. The two most common methods of flooring installation are **Trowel** and **Self Levelling** techniques, and these provide latitude in relation to work procedures suited to the size of the area to be treated, and the obstacles or detail to be worked around.

The following basic procedures using each application technique should be used as a guide.

Trowel

Prepare a mortar using 1 part **Epigen 4055** mixed with 5 parts 16/30 grade silica sand, and apply the mortar directly to all horizontal surfaces, fairing the applied mortar with a steel trowel to provide an even seamless floor. 6mm is nominally the minimum application thickness that should be applied.

Sand may be broadcast over the entire area to increase the non slip nature of the floor. The excess sand should be swept clear and the floor sealed with 1 final coat of **Epigen 4055**, or **Epigen 4028** if a solid colour is desirable.

NOTE: This same mortar is the same type applied into all horizontal/vertical corners of a concrete bund to form a coving that resists buildup of soilage or ponding liquor.

Self Levelling

Prepare a flowing mortar using 1 part **Epigen 4055** mixed with 1.5 parts 30/50 grade silica sand, and screed the mortar directly to all horizontal surfaces using a notched trowel or similar tooling to provide a seamless floor. 3mm is nominally the minimum application thickness that should be applied.

Allow the applied mortar to settle for several minutes before rolling the entire area using a spiked roller. Silica sand should then be broadcast over the entire area, blinding out completely the applied mortar. Allow to cure.

The excess sand should be swept clear and the floor sealed with 1 final coat of **Epigen 4055**, or **Epigen 4028** if a solid colour is desirable.

Variations in application thickness may be achieved by different apertures in the notched trowel.

The selection of either **Epigen 4055** or **Epigen 4028** in providing the final coat for flooring should be based on whether neutral coloured flooring is acceptable, or a white pigmented (solid colour) coating is desired, similar colour to that which would be obtained when using **Epigen 4029** on the vertical surfaces.

EPIGEN 4055 (Cont)

CLEANING

Prior to curing, Epigen products should be cleaned from all tools and equipment using Epigen Diluent.
Soap and water or a good quality hand cleaner may also be used. Do not use solvents to clean contaminated areas of the body, such as hands etc.

Coverage Fast Guide

As an easy guide to calculating material consumption the following suggestions are offered as a basis from which to work. Note that consumption may vary depending upon the type of surfaces to which the materials are applied as well as the work practices utilised during installation.

Trowel

Mortar prepared from 1 pt **Epigen 4055** blended with 5 pts 16/30 Silica Sand
1.8 kg of mortar yields 1m² @ 1 mm thick,

For a target Dry Film Thickness of 6mm
allow 1.8 kg of **Epigen 4055** / m².
allow 9 kg of 16/30 Silica Sand / m².

As required,
Overlay of 16/30 Silica Sand @ 1 kg/ m².
Finish coat of **Epigen 4055** or **Epigen 4028** @ 0.7 kg/ m².

Self Levelling

Mortar prepared from 1 pt **Epigen 4055** blended with 1.5 pts 30/50 Silica Sand
1.65 kg of mortar yields 1m² @ 1 mm thick,

For a target Dry Film Thickness of 3mm, apply following mortar @ 2mm
allow 1.4 kg of **Epigen 4055** / m².
allow 2.1 kg of 30/50 Silica Sand / m².

Overlay of 16/30 Silica Sand @ 1.4 kg/ m².
Finish coat of **Epigen 4055** or **Epigen 4028** @ 0.7 kg/ m².

STORAGE

Store both components out of direct sunlight and away from heat as warm compound will severely reduce the pot life.

Whilst the shelf life of the individual components is indefinite in their original unopened containers, prolonged storage may result in some settling and attention should be paid to this when mixing.

WARRANTY

The information contained in this data sheet, is to the best of our knowledge true and correct, but recommendations are made without guarantee, since conditions of use are beyond our control. Furthermore, nothing contained herein should be construed as a recommendation to use this product in conflict with existing patents.

EPIGEN EPOXY RESIN BASED PRODUCTS
MANUFACTURED BY PEERLESS INDUSTRIAL SYSTEMS PTY LTD