September 2022

SAFE STEP™ 550

Epoxy Anti-Slip Coating

Description:

EPIREZ® Safe Step® 550 is a high-solids, heavy duty, non-slip coating for application in slippery areas to make them safer for both pedestrian and rolling equipment traffic.

EPIREZ® Safe Step® 550 was developed for use in marine and industrial environments to provide a durable surface with the highest possible non-slip profile. The coating was engineered to withstand heavy traffic from forklifts, steel-wheeled vehicles and pedestrians.

Formulated with epoxy resins to provide optimum toughness and corrosion resistance, **EPIREZ® Safe Step® 550** is resistant to acids, alkalis, solvents, grease, oil, salt water, salt spray, detergents, alcohol, petrol, diesel, jet fuels, and hydraulic fluids. By virtue of its tenacious bond, rust will not creep under the coating if fractured.

EPIREZ® Safe Step® 550 offers optimum adhesion to concrete and metal surfaces and the coatings sealed, nonporous surface makes it easy to clean.

EPIREZ® Safe Step™ 550 has been tested by the CSIRO and has an anti-slip rating of **R12** as per AS 4586:2013 Appendix D. A copy of the test report is available upon request.

Intended Use:

- Ramps for vehicular and pedestrian traffic
- Chemical plants
- Wharves and loading terminals
- Commercial fishing operations
- Wet deck areas of cargo vessels
- Fuel handling depots
- Oil platforms
- Wet areas subject to vehicular and pedestrian traffic
- Printing plants
- Heavy manufacturing
- Oil refineries
- Harsh marine environments
- Stairways, catwalks and gangplanks
- Mining and Construction industries

Product Features:

- **Excellent non-slip properties**
- **Highly chemical resistant**
- **Excellent wear resistance**
- **High impact resistance**
- **Aggressive profile friction surface provides high traction**
- **Full range of colours available**
- **High build application**
- **Easily applied**

Estimating Data:

8L EPIREZ® Safe Step 550™ + 1kg EPIREZ® Colourpack = 6.4m2 (Roller)
8L EPIREZ® Safe Step 550™ + 1kg EPIREZ® Colourpack = 8.8m2 (Trowel)

1 x EPIREZ® Colourpack required for each 8Ltr kit

Typical Physical Properties:

Mixing Ratio by Volume	1 Hardener to 5 Compound
Application Temperatures	10˚C to 40˚C
Work Time per pack	1 hour @ 20˚C
Tack Free Time @ 25˚C	8 hours
Cure Times:	
Light Traffic	24 hours
Heavy Traffic	72 hours
Full Chemical Resistance	7 days
Solids Content	93%
Density	1.92
Coefficient of Friction	Dry: 0.88 Wet: 0.93

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Surface Preparation:

Concrete

Remove prior coatings and all loose crumbly material and drummy areas. New concrete must be at least 28 days old. Remove any oil or grease contamination by washing with a suitable surface degreaser. Hose off with high pressure water and allow to dry.

Acid etch using **EPIREZ® Concrete Etch & Cleaner.** Neutralise surface by washing with fresh water and allow to dry. Alternatively, lightly captive blast clean to expose firmly held aggregate to industrially accepted standards.

EPIREZ® Safe Step® 550 may be directly applied to good quality dense prepared concrete. Porous, highly absorbent concrete and steel should be primed with **EPIREZ® Epoxy Primer/ Sealer** prior to application to provide better surface adhesion. Allow to dry for approximately 3 hours or until touch dry prior to the application of **EPIREZ® Safe Step® 550**. Drying times will be lengthened by high humidity and low temperatures. Application of **EPIREZ® Safe Step® 550** should take place within 24 hours after priming.

Steel

Abrasive blast to AS 1627 Part 4 – 2005 to class 2½ white metal and achieve profile height minimum 75 - 100 microns. Coating of the steel should be completed within 4 hours

Surface preparation guidelines cannot cover all site or field contingencies and it is always recommended that an on-the-spot adhesion test be performed as part of the Standard Quality Assurance audit for the project.

Mixing Instructions:

It is strongly recommended that full units be mixed, as ratios are pre-measured.

Proper homogenous mixing of resin and hardener at the correct ratio is essential for the curing and development of stated properties.

Precondition product to between 18 to 25°C before use.

Add the complete contents of the selected colour pack to each 8 litre compound and mix thoroughly with a slow speed (400 rpm) mechanical mixer. Make sure all settlement is lifted off the bottom of the container and is uniformly dispersed in the material. Pour the entire contents of the hardener container into the compound and mix with the slow speed mechanical mixer for approximately 3-5 minutes or until the mixed material assumes a uniform colour and appearance. Scrape the bottom and sides during the mixing process to ensure all parts are mixed thoroughly. Working pot life is approximately 1 hour at 20°C. Safe Step® 550 can be applied by roller, trowel or spray equipment if required.

Note: Take care to avoid air entrapment into the mix. Keep propeller below liquid line, as additional air can be added to mixture, resulting in air bubbles on the surface of the finished product.

Application Instructions:

EPIREZ® Safe Step® 550 can be applied at surface temperatures between 10°C and 40°C. Application is not recommended when surface temperatures are above 40°C or below 10°C. Curing times will increase substantially at temperatures below 10°C.

Higher temperatures will shorten curing time and conversely, lower temperature will lengthen curing time. Exterior applications must be protected from rain for at least 12

to 24 hours after application according to humidity. Protect from heavy or extended exposure to water, oil and chemicals for 5 to 7 days during final cure.

ROLLER

Rolled applications provide the most aggressive non-slip characteristics with an irregular, ridged profile.

Use a hard-faced roller. It is important that the rolled profile expose the maximum amount of non-slip aggregate. If aggregate is not properly exposed, the coating may become slippery when wet. Pour a "ribbon" of **EPIREZ® Safe Step® 550** on the surface approximately 600mm long and 150mm wide. Roll material in one direction only, in slow straight strokes pulling material towards one with a moderate amount of pressure. Do not over-roll too many times or press down too heavily. Be careful that material does not build up too quickly along welds (roll across, not along them). Material applied too thickly may not cure properly.

TROWEL

Trowel applications provide excellent non-slip characteristics with a rough, textured surface.

Use a flexible bladed plasterer's finishing trowel approximately 100mm by 300mm. Use smooth edges, not notched.
Pour a "ribbon" of **EPIREZ® Safe Step® 550** on the surface approximately 600mm long and 150mm wide. Hold trowel at 45° angle to surface and spread with a sweeping motion. Reverse the angle of the trowel for the opposite stroke. Pull material towards one. To cover corners, etc. pull using straight strokes using the material on the trowel.

EPIREZ® Safe Step® 550 Should not be applied at temperatures below 10^0C or temperatures above 40^0C.Curing times will increase substantially at temperatures below 10^0C.
EPIREZ® Safe Step® 550 should not be applied to surfaces known to suffer from rising damp.
EPIREZ® Safe Step® 550 is not recommended for application over tiles.

Maintenance

Maintain a clean surface to ensure that the non-slip safety performance of **EPIREZ® Safe Step® 550** Coating be maximised.

The following cleaning procedure is recommended.

Clean with a neutral detergent cleaner mixed as directed with water. For stubborn oil and grease use a suitable surface degreaser prior to cleaning with a neutral detergent. Scrub surface with a long handled, fibre-bristle brush or floor machine. Rinse with clean water and dry.

Note: It is important that manufacturer's instructions on dilutions of cleaning solutions are followed.

Clean Up:

Tools and equipment may be cleaned before hardening commences by washing in **EPIREZ® Clean Up Solvent.** Do not use for cleaning hands or mixing with product.

Storage:	Store in dry conditions between 10°C and 30°C, away from sources of heat and naked flames. Protect from frost. When stored in original sealed containers, the Minimum shelf life is two (2) years.
Warranty:	Epirez will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.
Disclaimer:	All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Polymers & Fluids and EPIREZ® makes no representations or warranties of any kind concerning this data.
Order Information:	8Ltr E992908
Health & Safety Information:	For Health & Safety information, refer to Safety Data Sheet available from ITW Polymers & Fluids upon request or available on our website www.epirez.com.au or www.epirez.co.nz

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