

# SAFE<sup>®</sup> STEP



## TECHNICAL DATA

### SAFE STEP<sup>®</sup> 550

#### *Epoxy Anti-Slip Coating*

##### Description

**Safe Step<sup>®</sup> 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.

**Safe Step<sup>®</sup> 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, **Safe Step<sup>®</sup> 550** is resistant to acids, alkalies, 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.

**Safe Step<sup>®</sup> 550** offers optimum adhesion to concrete and metal surfaces and the coatings sealed, nonporous surface make it easy to clean.

##### Areas of Application

- 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 - any place that receives the harshest wear and tear
- 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

##### 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

---

The information contained in this Technical Bulletin is as up to date and correct as possible as at the time of issue. The data provided should be used as a guide only as the performance of the product will vary depending on differing operating conditions and application methods.

The sale of any product described in this Technical Bulletin will be in accordance with ITW Polymers & Fluids Conditions Of Sale, a copy of which is available on request. To the extent permitted by law, ITW Polymers & Fluids excludes all other warranties in relation to this product.

## General Properties

|                              |   |                               |
|------------------------------|---|-------------------------------|
| Shelf life                   | : | 2 years                       |
| Mixing Proportions by Volume | : | 1 Hardener to 5 compound      |
| Solids Content               | : | 93%                           |
| Density                      | : | 1.92 kg/litre                 |
| Application Temperatures     | : | 10°C – 40°C                   |
| Work Time Per Pack           | : | 1 hour at 20°C                |
| Tack-free Time               | : | 8 hours at 20°C               |
| Cure Times                   |   |                               |
| Light Traffic                | : | 24 hours at 20°C              |
| Heavy Traffic                | : | 72 hours at 20°C              |
| Full Chemical Resistance     | : | 7 days                        |
| Finish                       | : | Semi gloss variegated profile |
| Colours                      | : | Full range available          |
| Abrasion Resistance          | : | Excellent                     |
| Coefficient of friction      | : | Dry – 0.88                    |
|                              | : | Wet – 0.93                    |
| Water Resistance             | : | Excellent                     |
| Clean ability                | : | Very good                     |
| Temperature Resistance       | : | Up to 95°C Dry Heat           |

## Estimating Data

|        |   |                             |
|--------|---|-----------------------------|
| Roller | 8 litre Safe Step <sup>®</sup> 550 + 1 kg Epirez Colourpack | = 6.4 m <sup>2</sup> / coat |
| Trowel | 8 litre Safe Step <sup>®</sup> 550 + 1 kg Epirez Colourpack | = 8.8 m <sup>2</sup> / coat |

## Application Directions

### Surface Preparation

#### Concrete

Remove any old paint and all loose material. New concrete must be at least 28 days old. Ensure surface is clean, free of dust, laitence, oils, curing compounds or other contaminants. Remove any oil or grease contamination by washing with a suitable degreaser. Hose off with high-pressure water and allow to dry. Acid etch using **Epirez<sup>®</sup> 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.

#### Steel

Ensure that the surface is free from oil and grease. Abrasive blast clean in accordance with **AS1627:4 - 2005** to a Class 2 ½ near white metal finish. Coating of the prepared 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.

---

#### AUSTRALIA

ITW Polymers & Fluids  
100 Hassall Street  
Wetherill Park NSW 2164  
Phone (02) 9757 8800 Fax (02) 9757 3855

#### NEW ZEALAND

ITW Polymers & Fluids  
Unit 2 / 38 Trugood Drive  
East Tamaki 2013, Auckland  
Phone (09) 272 1945 Fax (09) 273 6489

## Priming

**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 (123)** prior to application to provide better surface adhesion. Allow to dry for approximately 3 hours or until touch dry prior to the application of **Safe Step® 550**. Drying times will be lengthened by high humidity and low temperatures. Application of **Safe Step® 550** should take place within 24 hours after priming.

## Application

**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.

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.

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 **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 **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.

## Cleaning

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

---

### AUSTRALIA

ITW Polymers & Fluids  
100 Hassall Street  
Wetherill Park NSW 2164  
Phone (02) 9757 8800 Fax (02) 9757 3855

### NEW ZEALAND

ITW Polymers & Fluids  
Unit 2 / 38 Trugood Drive  
East Tamaki 2013, Auckland  
Phone (09) 272 1945 Fax (09) 273 6489

## Limitations

**Safe Step® 550** Should not be applied at temperatures below 10°C or temperatures above 40°C. Curing times will increase substantially at temperatures below 10°C.

**Safe Step® 550** should not be applied to surfaces known to suffer from rising damp.

**Safe Step® 550** is not recommended for application over tiles.

For more information contact the technical department.

## Maintenance

Maintain a clean surface to ensure that the non-slip safety performance of Supatuff Anti-Slip 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.

## Packaging

Safe Step® 550 is available in 8 litre packs. Each pack contains Hardener and Compound in correct proportions for use. Selected **Epirez® Colourpack** must be added.

## Ordering Information:

|                                       |          |
|---------------------------------------|----------|
| <b>Safe Step® 550 Neutral</b> 8 litre | #992908  |
| <b>Epirez® Colourpack</b> 1 kg        | #Various |

## Note

The figures quoted for work time, setting time and strengths are not definitive. They are dependent on job site conditions and will vary accordingly. In all cases we endeavour to provide typical figures for use as a guide.

## Health & Safety Information

The product is hazardous. A Material Safety Data Sheet is available from the ITW Polymers & Fluids Technical Department upon request or available on our website [www.epirez.com.au](http://www.epirez.com.au).

---

### AUSTRALIA

ITW Polymers & Fluids  
100 Hassall Street  
Wetherill Park NSW 2164  
Phone (02) 9757 8800 Fax (02) 9757 3855

### NEW ZEALAND

ITW Polymers & Fluids  
Unit 2 / 38 Trugood Drive  
East Tamaki 2013, Auckland  
Phone (09) 272 1945 Fax (09) 273 6489