

## Universal Concrete and Steel Primer

info@shieldcreteinternational.com  
www.shieldcreteinternational.com

### Product Description

ShieldPrime UNI is two components, high solids, and liquid applied, low viscosity epoxy-polyamine primer surface with unique penetrating characteristics. It is a carbon steel primer suitable for Polyurethane and Polyurea to enhance cross-linking to give excellent adhesion.

### Technical/Performance Data

Solids by Volume, ASTM D-2369	100% +2%
Volatile Organic Compounds, ASTM D 2369-81	90 g/liter
Theoretical Coverage Rate @100microns	9 m <sup>2</sup> /liter (varies with substrate and porosity)
Specific Gravity	A:0.96, B: 1.16
Viscosity @24°C	Part A: 500 – 15000 cps Part B: 11000 – 14000 cps

Note: All values above are at 25°C.

### Application Areas

- ✓ Civil Engineering
- ✓ Industrial Maintenance
- ✓ Marine Coatings
- ✓ Mining
- ✓ Metal Surfaces

### Features & Benefits

- ✓ Low odor
- ✓ High Solids
- ✓ Low Solvent
- ✓ Low VOCs
- ✓ Cures to a tough, water-resistant coating
- ✓ Formulated without lead, chromate, or mercury components
- ✓ Low viscosity
- ✓ Fast Curing
- ✓ No greasiness at low temperature
- ✓ Long Pot Life
- ✓ 100% Solids
- ✓ Penetrates surface rust, crevices, and back-to-back angles
- ✓ Reinforces rusty steel, masonry and aged "White Rusted" zinc surfaces

### Processing Data

Mixing Ratio V/V	3:5
Pot Life, 25	30-45 minutes
Tack Free Time (DFT & Temperature dependent)	2 hours
Touch Dry	3-4 hours
Hard Dry	6-7 hours

### Application Instructions

#### Mixing:

The volume mixing ratio is 3-part Side-A Brown Liquid to 5-part Side-B Clear Liquid. ShieldPrime UNI Side-A and Side-B should be thoroughly mixed individually prior to combining to ensure a homogeneous material. The combined components should be thoroughly mixed using mechanical mixer at slow speed or for at least 5 minutes if mixed by hand.

This product cannot and must not be thinned or diluted under any circumstances.

#### Surface Preparation:

The surface of a steel substrates should be abrasive blast lean to remove overall previous coating or surface cleanliness following as SA 2.5 BS 7079: Part A1:1989 (ISO 8501-1:1988). Surface profile is recommended in range of 75-100µm. and manually prepares surfaces should be minimum standard of St 3 BS 7079: Part A: 1989 at the time of coating.

For application onto stainless steels substrates, the surface should be degreased and wherever practical, blast cleaned to S.A. 2.5. For application onto cold rolled steel and non-ferrous metals such as galvanized surfaces, degreasing should be undertaken using an appropriate emulsifying agent. For optimum adhesion, abrading is recommended.

#### Equipment Clean-up:

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

#### Application:

This product can be applied using an airless sprayer, brush, or Phenolic resin core roller. Allow ShieldPrime UNI to become tack free before applying the coating.

Recommended surface temperature should be greater than 10°C and at least 3°C above the dew point. This product is very sensitive to heat and moisture. Higher temperatures and/or high humidity will significantly accelerate the pot life. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extend the cure time.

## Colours

Side-A: Black      Side-B: White

## Packaging

40 litre kit: one 15 litres pail of Side-A Brown Liquid and one 25 litres pail of Side-B Clear Liquid.

## Storage

This product has a shelf life of one year from date of manufacture in original, factory sealed containers.

## Limitations / Warning

Not UV stable. Do not dilute this product. Mix no more material than can be used within 45 minutes.

Containers that have been opened must be used as soon as possible. This product is difficult to clean up after it has cured. Surfaces must be dry, clean, and free of foreign matter.

This product contains Epoxy and curatives.

## Additional Information

Standard 40L kits in 15L and 25L drums per kit, with ratio of 3:5. Other sizes may be available on request.

## DISCLAIMER

The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials and equipment used, as well as varying working conditions and environments beyond our control we strictly recommend carrying out intensive trials to test the suitability of our products regarding the required processes and applications. This data sheet is provided free of charge, and we do not accept any liability regarding the above information or regarding any verbal recommendation, except for cases where we are liable of gross negligence or false intention.