# **Emblem Application on Metal surface (D)**



# **STOPRUST**

# ZINC RICH EPOXY PRIMER

#### **DESCRIPTION**

Sx47-stoprust is a two-component epoxy based anti-corrosive primer.

#### **RECOMMENDED FOR**

Interior & exterior applications on iron & steel in very aggressive environments that are exposed to salt water, sea air and very humid conditions.

#### **KEY FEATURES**

- Combats Rust
- Resistant to water
- Zinc rich
- Resistant to chemicals
- Resistant to aggressive conditions
- Highly Adhesive
- Suitable for the embedment of coated substrate in concrete

#### **PHYSICAL PROPERTIES**

| Solvent Type             | Solvent based  |  |  |
|--------------------------|--|--|--|
| Color                    | White or Grey (RAL 7012)   |  |  |
| Corrosion category       | C4, areas with moderate salinity, chemical plants, swimming pools, coastal areas |  |  |
| Spreading Rate           | 8-16m <sup>2</sup> /Kg depending on application technique and surface porosity   |  |  |
| Flash Point              | Base 27°C, Hardener 27°C   |  |  |
| Pot Life                 | 60 min at 25°C   |  |  |
| Recoat                   | After 3 Hours  |  |  |
| Full Cure                | 3 days   |  |  |
| Dry Film Thickness       | 30-60 microns depending on system and application method                         |  |  |
| Thinner                  | 20-50 % clean epoxy thinner depending on application method                      |  |  |
| Scrub Resistance         | Greater than 10,000 cycles based on ASTM D2486                                   |  |  |
| Abrasion                 | CS17 wheels, 1000g weights, 500 cycles. Weight loss: 30mg based on ASTM D4060-14 |  |  |
| Impact resistance        | 0.3 m/Kg based on ASTM D2794-93  |  |  |
| Adhesion and flexibility | No cracks at 1/8" conical mandrel ASTM D 522                                     |  |  |
| Adhesion to steel        | >13 MPa based on ASTM D4541 (Dolly fracture)                                     |  |  |
| Density                  | Approx. 1.4 g/cm³  |  |  |
| Solids                   | Approx. 50% by volume  |  |  |
| Viscosity                | 4000-6000 cP (Spindle 3/ Speed 5) 35-45 °C                                       |  |  |
| Bases                    | None   |  |  |
| voc                      | 331 g/l as Per EPA Method 24   |  |  |

#### **MPI STANDARDS COMPLIANCE**

- Complies with MPI #101 primer epoxy anticorrosive for metal
- Complies with MPI #120 epoxy, high build self-priming low gloss

# **STOPRUST**

# ZINC RICH EPOXY PRIMER

# **SURFACE PREPARATION**

#### Steel Surface Conditions

The steel shall preferably be Rust Grade A or B according to ISO 8501-1. The use of steel with Rust Grade C requires tighter inspection of surface profile after blasting as well as of possible salt contamination. The final steel condition including welds and edges shall conform to preparation grade P2, ISO 8501-3: "Preparation of steel substrates before application of paints and related products - Visual assessment of surface cleanliness". The steel surface shall be thoroughly prepared so that the coating achieves an even distribution at the specified nominal dry film thickness and has adequate adhesion.

## General Preparations

In order to obtain best performance, abrasive blast cleaning is recommended.

Abrasive blasting/abrasive sweep blasting: Before blasting any deposits of grease or oil must be removed from the steel surface with a suitable detergent followed by high pressure fresh water cleaning.

Minor spots of oil/grease may be cleaned with thinner and clean rags - avoid smearing out the contamination.

Possible alkali weld deposits, chemicals used for testing of welds, soap residues from the pressure testing must be removed by fresh water hosing. Abrasive blasting to Sa 2½ (ISO 8501-1:2007) with a sharp-edged surface profile corresponding to Rugotest No. 3, BN10a-b, Keane-Tator Comparator, 2.0 G/S, 2 S, or ISO Comparator, Medium (G).

#### Spot-repairs

Clean damaged areas thoroughly by power tool cleaning to minimum St 3 or by abrasive blasting to minimum Sa 2, preferably Sa  $2\frac{1}{2}$ . As an alternative, water jetting to minimum Wa 2 (ISO 8501-4:2006) may be used or according to specification. Feather edges to sound and intact areas. Brush off loose material. Touch up to full film thickness.

#### STEEL RUST GRADES

|              | RUST GRADES BASED ON ISO 8501-1   | UNBLASTED | 1 BLAST CLASS | 2 BLAST CLASS | 2.5 BLAST CLASS | 3 BLAST CLASS |
|--------------|---|-----------|---------------|---------------|-----------------|---------------|
| RUST GRADE A | Steel surface largely covered with adherent mill scale but little, if any, rust.  |           |               |               |                 |               |
| RUST GRADE B | B Steel surface which has begun to rust and from which the mill scale has begun to flake.   |           |               |               |                 |               |
| RUST GRADE C | Steel surface on which the mill scale has rusted away or can be removed by scraping, but with slight pitting visible under normal vision. |           |               | 4             |                 |               |
| RUST GRADE D | Steel surface on which the mill scale has rusted away and on which general pitting is visible under normal vision                         |           |               |               |                 |               |

# **STOPRUST**

# ZINC RICH EPOXY

## PRIMER

# **APPLICATION CONDITIONS**

Do not apply at temperatures below 5 °C or when rain is expected.

# **APPLICATION METHOD**

#### APPLICATION

Before using, stir thoroughly to ensure any settled pigment is re-dispersed. If necessary, thin the material with thinner.

Brush: Use light, even strokes. Excessive brushing reduces film thickness and protection.

Roller: A 3/8" nap roller should be used on rough surfaces. Cover approximately one square meter at a time. Roll away from previously coated area and work back to it for a uniform appearance. Use a brush on crevices and sharp edges.

Spray Gun: Follow spray gun directions carefully. Always keep the gun ten to twelve inches from the surface and in motion while spraying.

#### **DRY & RECOAT**

Dry and recoat times are based on 70°F (21°C) and 50% relative humidity. Allow more time at cooler temperatures and higher humidity. Dries to the touch in 2-4 hours, to handle in 5-9 hours and can be recoated after 24 hours.

#### **PACK SIZE**

| 上世 计算机过程 计图      | Base White | Base Grey | Hardener |
|------------------|------------|-----------|----------|
| 1 US Quart (kg)  | 1.18       | 1.18      | 0.17     |
| 1 US Gallon (kg) | 4.7        | 4.74      | 0.68     |
| 1 US Drum (Kg)   | 23.5       | 23.7      | 3.4      |

#### SHELF LIFE

24 months from the date of production.

#### STORAGE AND HANDLING

Care should be taken to avoid spillage. Product should be stored in a dry area and protected from freezing. Extreme temperatures may cause paint to become unusable. For example: freezing and thawing may cause paint to gel, and high heat may cause solid skin to form.

#### **SAFETY**

Use under well ventilated conditions. Do not breathe or inhale spray mist or sanding dust. Avoid skin contact; spillage on the skin should immediately be removed with suitable cleanser, soap and water. In case of eye contact, flush immediately with water for at least 15 minutes and seek medical attention immediately. If you experience difficulty breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

#### **CLEANING**

Remove as much leftover product as possible from the application equipment before cleaning. Clean equipment immediately after use with mineral spirits or paint thinner. Do not empty product into drains or watercourses. Wash hands after use in warm soapy water.

#### **DISCLAIMER**

Product batches are subject to stringent quality control checks in conformity with ISO 9001:2008, Certificate CH12/1128.

The information submitted in this manual is correct to the best of our knowledge & experience. No liability whatsoever can be accepted on the basis of the information supplied herein.

# د عاد الا النعار

# TWO-PACK, SELF-PRIMING POLYURETHANE

#### **DESCRIPTION**

POLYURETHANE PL1 is a high performance, high-build, two-pack HDI cured polyurethane coating.

#### **RECOMMENDED FOR**

Interior & exterior applications on concrete, metal structures, above ground and underwater tanks, high-traffic floors exposed to industrial or marine atmospheres, steel, blast cleaned steel or wheel-abraded steel, and wood.

#### **KEY FEATURES**

- UV resistance
- Non-yellowing
- Resistant to water
- Resistant to highly aggressive external exposure
- Excellent anti-corrosive properties

- Self-priming
- Outstanding durability
- Resistant to splashes of mild chemical
- Resistant to acids
- Resistant to hot saline water (salty water)

#### **PHYSICAL PROPERTIES**

| Solvent Type             | Moisture free PU thinner   |                     |  |  |
|--------------------------|--|---------------------|--|--|
| Finish Type              | Full gloss finish  |                     |  |  |
| Solids (volume)          | 64% as supplied  |                     |  |  |
|                          | 48% diluted with 25% thinner   |                     |  |  |
|                          | 45% diluted with 30% thinner   |                     |  |  |
| Solids (weight)          | 73% as supplied  |                     |  |  |
| Spreading rate by Roller | 8m²/L. wet film thickness 125 microns with 25% dilution                                |                     |  |  |
| Spreading rate by Spray  | 6.6m²/L. wet film thickness 150 microns  |                     |  |  |
| Pot life                 | 1 hour at 20 °C  | 1 hour at 20°C      |  |  |
| Average Dry Time         | Touch-dry in 1 hour - Full cure after 3 days   |                     |  |  |
| Recoat                   | After 3 hours at 20°C / After 2 hours at 30°C  |                     |  |  |
| Dry Film Thickness       | 60-70 microns depending on application method and surface porosity                     |                     |  |  |
| Density (A + B)          | 1.32 ±0.02 g/cm³ for white base  |                     |  |  |
|                          | 1.17 ±0.02 g/cm³ for WI base   |                     |  |  |
|                          | 1.05 ±0.02 g/cm³ for N base  |                     |  |  |
| Dilution                 | 25% with PU thinner for roller application / 30% with PU thinner for spray application |                     |  |  |
| Abrasion                 | CS17 wheels, 1000g weights, 500 cycles. Weight loss: 70mg                              |                     |  |  |
| Hardness                 | 3H-4H  | Based on ASTM D3363 |  |  |
| Adhesion                 | >3.5MPa (concrete fracture)  | Based on ASTM D4541 |  |  |
| Color                    | White and Clear Bases  |                     |  |  |
| VOC                      | 355g/L as Per EPA Method 24  |                     |  |  |

# TWO-PACK, SELF-PRIMING POLYURETHANE

## CHEMICAL RESISTANCE / 24 HOUR OPEN SPOT TEST BASED ON ASTM D 1308-2

| 10% Hydrochloric Acid    | No Effect  |
|--------------------------|------------|
| 10% Sulfuric Acid        | No Effect  |
| 10% NaOH                 | No Effect  |
| Saturated Sugar Solution | No Effect  |
| Saturated Salt Solution  | No Effect  |
| Ethanol                  | No effect  |
| Motor Oil                | No Effect  |
| Gasoline                 | No Effect  |
| Xylene                   | Minor spot |
| Isobutanol               | No effect  |
| Clorox                   | No Effect  |

#### MPI STANDARDS COMPLIANCE

Complies with MPI #72 polyurethane, two component, pigmented, gloss

#### SURFACE PREPARATION

All surfaces must be cured, clean, dry, and free from dirt, dust, rust, stains, grease, oil, mildew, wax, efflorescence, bond-breakers and other contaminants. Remove all loose, peeling, or chalky paint by sanding, scraping, or any other appropriate methods. Repair all cracks, holes, and other surface imperfections with a suitable patching material. Repaired surfaces should then be sanded smooth and dusted clean. Due to the high resin content, it is important to prime with a suitable primer.

New plaster or masonry surfaces must be allowed to cure (28 days) before applying base coat. Cured plaster should be hard, have a slight sheen and a maximum pH of 10. A soft, porous or powdery plaster indicates improper cure. Never sand a plaster surface; knife off any protrusions and prime plaster before and after applying patching compound. Poured or pre-cast concrete with a very smooth surface should be etched or abraded to promote adhesion, after removing all form release agents and curing compounds. Remove any powder or loose particles.

**CAUTION:** Scraping or sanding surfaces of older buildings may release dust containing lead or asbestos. **EXPOSURE TO LEAD OR ASBESTOS CAN BE VERY HAZARDOUS TO YOUR HEALTH.** Always wear appropriate personal protective equipment during surface preparation and finish cleanup of any residues by water-washing all surfaces.

#### **APPLICATION CONDITIONS**

Do not apply at temperatures below 5 °C or when rain is expected.

#### **APPLICATION METHOD**

Stir well Components & wait for 15 minutes before applying the product. Easy to apply by brush, roller or airless spray. Thinner should be added after mixing the components. Too much solvent results in lower sag resistance & slower cure. Applications should be in accordance with BS6150 & BS5493 standards.

For Roller application, dilute at 25%

For spraying use 2 bar pressure with a 1.4-1.7mm nozzle.

DO NOT DIVIDE OR USE HALF OF THE PRODUCT. ONCE THE PACK HAS BEEN OPENED, IT SHOULD NOT BE CLOSED BACK. YOU SHOULD BE COMMITTED TO USING THE PRODUCT.

#### **PACK SIZE**

| HISTORY OF THE STATE OF | White/W0 | W1   | N    | Hardener | -1/6 |
|-------------------------|----------|------|------|----------|------|
| 1 US Quart (kg)         | 1.22     | 0.91 | 0.74 | 0.15     |      |
| 1US Gallon (kg)         | 3.65     | 2.73 | 2.23 | 0.45     |      |

# TWO-PACK, SELF-PRIMING POLYURETHANE

#### **SHELF LIFE**

- Hardener: 12 months from the date of production.
- Base: 24 months from the date of production.

#### STORAGE AND HANDLING

Care should be taken to avoid spillage. Product should be stored in a dry area and protected from freezing. Extreme temperatures may cause paint to become unusable. For example: freezing and thawing may cause paint to gel, and high heat may cause solid skin to form.

#### **SAFETY**

Use under well ventilated conditions. Do not breathe or inhale spray mist or sanding dust. Avoid skin contact; spillage on the skin should immediately be removed with suitable cleanser, soap and water. In case of eye contact, flush immediately with water for at least 15 minutes and seek medical attention immediately. If you have trouble breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

#### **CLEANING**

Remove as much leftover product as possible from the application equipment before cleaning. Clean equipment immediately after use with paint thinner. Do not empty product into drains or watercourses. Wash hands after use in warm soapy water.

#### **DISCLAIMER**

Product batches are subject to stringent quality control checks in conformity with ISO 9001:2015, Certificate LB18/234269.

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# LIGHT REFLECTIVE

# LIGHT REFLECTIVE ADDITIVE



#### DESCRIPTION

Light reflective are solid, spherical glass beads for use with marking materials such as road marking paint.

# **RECOMMENDED FOR**

To be used as a drop agent on road marking paints to increase road safety in an economical manner. Thanks to the retro-reflective action at night, a vehicles headlight beam is returned to the driver's eye. The microspheres not only multiply the visibility of the markings at night, but also increase the markings durability in general.

#### PHYSICAL PROPERTIES

| Grade           | 800                             |
|-----------------|---------------------------------|
| Hardness        | 6-7 Moh Scale                   |
| Specific Weight | 2.5g/cm <sup>3</sup>            |
| Bulk Density    | 1.6 kg/Lt                       |
| Free Silica     | None                            |
| Shape           | 80% Round                       |
| Reflectivity    | Nd ≥ 1.5 for coated & un-coated |

#### **APPLICATION CONDITIONS**

Do not use or apply at temperatures below  $5^{\circ}\text{C}$  or when rain is expected.

# **APPLICATION METHOD**

Apply glass beads on wet coat of paint

## **PACK SIZE**

■ 1.2 kg

# STORAGE AND HANDLING

Care should be taken to avoid spillage. Store in a dry area.

## **DISCLAIMER**

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