

ShaliPrime® 2PU

2K Solvent Based Polyurethane Primer for Concrete & Metal Surface



STP Limited

Description

ShaliPrime® 2PU is two components, solvent based polyurethane primer, suitable for priming concrete surfaces, including walls, and metals prior to the application of any PU Flooring / PU Liquid applied membrane or coating respectively.

Product Information

Mixing Ratio	Component A : Component B = 88 : 12 (w/w)
Handling & Storage	Store under cover out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air conditioned environment. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
Packaging	For 10 kg unit pack; Part A = 8.8 kg & Part B = 1.2 kg
Shelf Life	12 months from the date of manufacture when maintain in protected storage in original unopened sealed condition at 5 - 38°C. Failure to comply with the recommended storage conditions may result in premature deterioration of the product.
Colour Variation	When applicable, products primarily meant for use as primers may have slight colour variations from batch to batch. Such products may fade and chalk when exposed to sunlight and weathering.

Technical Characteristics at 28°C, 60% RH

Colour	Colourless	Pot Life, hours	1
Theoretical Consumption**, kg / m ² Horizontal Concrete Primer Horizontal Broadcast Primer Vertical Metal primer	0.35 - 0.45 0.50 - 0.60 0.15 - 0.25	Recommended DFT / coat, μ	80 - 120
Touch dry @ 150μ WFT, hours	1 - 2	Solid Content, % By Volume	75 ± 3
Adhesion to concrete, 7 days, MPa	1.6	Mix Density, gm / cc	1.51 ± 0.02
Initial light foot traffic, days	1	Overcoating time, hours	6-12
Temperature resistance, occasional (steam cleaning), °C	120	Full cure, days	7
Chemical Resistance (Spot test)	Resistant to acid & alkali	Shore A Hardness, 7 days	40 - 50

** These figures are theoretical and do not include for any additional material required due to surface porosity, surface profile, variations in level and wastage, etc.

Field of Application

- Used as primer on concrete surface prior to the application of base coat / floor toppings like ShaliFloor 2PU FC, ShaliFloor SL TC 3 PU, and ShaliFloor Deck Coat 2PU.
- As a primer for MS substrate protection coating system.
- Ramps / car parks / parking bays / pedestrian walkways / roof decks.
- Industrial floors, cold stores / warehouses / factories and hangars.

- Primer for metal coating with epoxy or polyurethane.
- Laboratories / hospitals / food and beverage plants / kitchens, high tech manufacturing facilities / dairies,

Advantages

- Material is very easy to apply.
- Facilitates better bonding of Polyurethane Floor Topping, coating and liquid applied membrane.
- Prevents air release from the porous substrate, which may otherwise cause bubbles in the final Polyurethane/epoxy topping later.
- Seals porous surface to give quality finish.

Application Information

- ✓ **Substrate Temperature** - +10°C Min / +40°C Max
- ✓ **Ambient Temperature** - +10°C Min / +40°C Max
- ✓ **Substrate Moisture Content.** - < 5%

Application Methodology

> Surface Preparation

- Steel: blast cleaned to ISO-Sa21/2 and remove dust, flakes, oil, grease or other loose foreign particles. Application of **ShaliPrime® 2PU** should be straight after steel preparation to prevent surface rusting
- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.
- Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.
- Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.
- Ensure that concrete must be cured at least 28 days.

> Material Preparation

- Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 3 minutes by low speed electric stirrer (300 - 400 rpm) or other suitable equipment until a uniform mix has been achieved.
- Wait for 5 minutes to ensure escape of entrapped air.
- To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix.
- Over mixing must be avoided to minimise air entrainment.

> Application of Material

- Apply **ShaliPrime® 2PU** by brush, spray, roller or squeegee on prepared surface.
- **Primer:** Apply **ShaliPrime® 2PU** direct to metal immediately after blasting. Allow it to touch dry.
- On concrete porous surface **ShaliPrime® 2PU** will be absorbed very quickly, leaving characteristic light coloured dry patches. In such cases it is recommended that a second priming coat be applied on these dry areas. This not only helps to ensure good adhesion but also prevents air release from the porous substrate which may cause bubbles in the final epoxy topping later.
- Ensure that **ShaliPrime® 2PU** is allowed to dry for 6-12 hours or left overnight for drying for subsequent coating.
- Ensure that the coating is not exposed to oil, chemicals or mechanical stress until fully cured.

Precautions

- Do not apply **ShaliPrime® 2PU** on surfaces known to, or likely to, suffer from rising dampness, potential osmosis problems or having relative humidity greater than 75 %.
- Do not apply **ShaliPrime® 2PU** to asphalt, weak or infirm concrete, unmodified sand / cement screeds, PVC tiles or sheets, or substrates known to move substantially e.g. steel walkways.
- Typically not recommended for exterior slabs on grade where freeze/thaw conditions may exist.

- Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.

Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet**.

- This material contains **Isocyanate**.
- Please observe the precautionary notices displayed on the container.
- Use under well ventilated conditions.
- Do not inhale spray mist.
- Avoid skin contact.
- Spillage on the skin should immediately be removed with suitable cleanser, soap and water.
- Eyes should be well flushed with water and medical attention sought immediately.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Cleaning & Maintenance

- Clean all tools immediately after use with STP Thinner only. Do not allow the material to harden.
- Hardened / cured material can only be mechanically removed.



STP Limited
Enhancing Structures' Life

Product Range

- Waterproofing and Insulation ■ Road Surfacing
- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



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