3 Component High Solids PU Coating

**PRODUCT DESCRIPTION**: FIBPOXY USL PU is a high build pu coating for walls, floors, concrete & metal structures. It has good resistance to abrasion and makes the floor surface dust free. The cured surface is hard and gives smooth finish. It is available in a number of color (FIBREX SHADE CARD) and has sufficient strength to withstand industrial traffic of light, medium and heavy duty trolleys, fork lifts with nylon / rubber wheels.

#### **AREAS OF APPLICATION**

- Chemical Plants & Pharmaceutical Industries
- Food Processing Areas
- Bottling Plants/ Water tanks
- Electric / Electronics Industries
- Computer Rooms
- Hospital Operation Theatres
- Nuclear Power Plants
- Laboratories
- Aerospace Industry & Airport Hangers
- LCD Manufacturing Plants
- Automobile Industries
- Tea Processing Units
- Textile Mills
- Dairies & Breweries

## **ADVANTAGE**

- Resists chemical, fungal & bacterial growth.
- Very high abrasion resistant.
- Easy to apply, flow-able consistency.
- Provides monolithic surface with good aesthetics.

# **APPLICATION METHODOLOGY**

### **SURFACE PREPARATION**

- Prepare the surface by mechanical grinding or other suitable method.
- Remove dust, flakes, oil, grease or other loose foreign particles by sand blasting, iron brush or compressed air. Remove any old painting using a surface grinder.
- For best bond, concrete surface be prepared as per CSP 1, 2 or 3 before priming.
- Ensure that the new concrete is cured for at least 28 days and surface moisture content is below 4 % before application.

### **MIXING**

 Add Component A to Component C (Filler) of FIBPOXY USL PU slowly to ensure complete dispersion and slowly add Component B (Hardener) of FIBPOXY USL PU to ensure complete dispersion. Mix for 5 - 10 minutes till a homogenous mix is obtained. The speed may be 300 - 500 rpm.  Transfer this mix into a new container to avoid contamination of any unmixed PU Resin/Hardener. Then, wait for 2-3 minutes for the product to settle and allow the entrapped air to escape, before transferring the material onto the floor.

**Product # 115.5** 

**Version no: 17.1.24** 

#### **PRIMING**

 Prime concrete surface with FIBPOXY PU PRIMER and allow it to dry for 6 – 8 hrs @ 27°C.

#### **APPLICATION**

- Apply mix of FIBPOXY USL PU and spread evenly over the recommended area using a notch trowel of the appropriate notch size. The notch of the trowel should be double the desired thickness of the FIBPOXY USL PU top coat.
- Anchor FIBPOXY USL PU near walls, around columns / foundations and at edges of trenches / gutters / bays and expansion joints by cutting a groove of 3 mm, atleast 20 mm inside the border. Roll the spike roller with a long handle on applied FIBPOXY USL PU to remove entrapped air. Ensure that the spike roller is not applied too long to leave any permanent indentation on surface and one should not use the spike roller after the topping has started to gel.
- Do not apply FIBPOXY USL PU over untreated expansion joints. Treat expansion joints with FIBSEAL PU 21/22 and use Fibseal JSE 700 or Fibseal JSP 700 for treating control and construction joints

# **CLEAN UP**

- •Clean all tools immediately after use with Fibrex Paint Remover. Do not allow material to harden.
- Service life of a floor will be considerably extended by good housekeeping. Regular cleaning may be carried out using a rotary scrubbing machine.

# **TECHNICAL SPECIFICATIONS**

Theoretical Coverage FIBPOXY USL PU	375-400gms/m <sup>2</sup> /250micron
Mixing Ratio (A:B:C)	2.61:1:5.65 (by weight)
Mix Density ASTM D	$1.74 \pm 0.02 \text{ g/cc}$
1475	

#### **TECHNICAL SPECIFICATIONS**

40 - 65 Minutes
10 - 40° C
•Foot Traffic 24 Hrs
<ul> <li>Vehicle Movement</li> </ul>
72 Hrs
•Full Cure 7 Days
Nil
22 ± 2 MPa
> 3 MPa Concrete
Failure
75 ± 5
58.5 ± 5 MPa
55 ± 5 mg / 1000
Cycle
< 0.5 %
9.8 ± 2 MPa
10-15 %

#### **CHEMICAL RESISTANCE**

Water	Pass
Vegetable Oil	Pass
Lube Oil	Pass
Diesel	Pass
Petrol	Pass
Kerosene	Pass
Xylene	Short Term
Milk	Pass
Citric Acid (15%)	Pass
Sodium Hydroxide (50%)	Pass
Salt	Pass
HCl (10%)	Short Term
H SO (40%)	Short Term
HNO (10%)	Short Term

All tests done for 7 days at 25° C. Short term means for few hours and should be regularly cleaned.

### **LIMITATIONS**

- Do not apply FIBPOXY USL PU on surfaces known to or likely to, suffer from rising dampness, potential osmosis problems or having relative humidity greater than 75 %. Consult fibrex before using FIBPOXY USL PU in those areas.
- Do not apply FIBPOXY USL PU to asphalt, weak or infirm concrete, unmodified sand-cement screeds, PVC tiles or sheets, or substrates known to move substantially e.g. steel walkways.

• Do not apply FIBPOXY USL PU over treated expansion joints.

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 In common with all pu material, some light shades may fade in the long term, when placed in adverse exposed conditions. Such changes (discoloration) if any, are normal and has no effect on the performance of FIBPOXY USL PU

# Please contact FIBREX for installation of floor coating over

- Oil / Fat rigged floors
- Floors with moisture content over 4 %
- Floors with rising moisture problem
- Asphalt based floor (interior)
- Floors with a pull off strength less than 1.5 N / mm<sup>2</sup>

# **COLOR RANGE**

FIBPOXY USL PU is available in various attractive colors (Fibrex shade card). Every effort is made in manufacturing to maintain consistency of color, however exact color can vary from one batch to other batch.

# **PACKAGING**

FIBPOXY USL PU

A part (PU Base) - 20 Kg bucket
B part (PU Hardener) - 20 Kg bucket
C part (Selected Aggregates) - 20 to 25Kg bags

Or Project Standards

#### **STORAGE**

Store the material at temperatures between  $+ 10^{\circ}$  C and  $+ 35^{\circ}$  C. In originally sealed packages, the material can be stored for 10-12 months. Be assured open drums/buckets/bags of material should be used quickly to avoid moisture contamination.

#### **PRECAUTIONS**

During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves, if necessary, a suitable barrier cream. In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents).

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Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to resin-based materials. Always wear gloves and eye/face protection as necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

# **DISPOSAL / SPILLAGE**

Spillage of any of the component products should be absorbed onto sand or other inert material and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations.

## **NOTE**

The information supplied in this datasheet is based upon extensive experience and is given in good faith in order to help you. Our company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products however as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

#### **HEALTH AND SAFETY**

This material is intended to be used by trained professionals with proper equipment's. The following safety measures are recommended:

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- Wear protective gloves, clothing, goggles, hearing protection for noise reduction and hard hats for falling debris.
- Do not eat, drink or smoke while in active contact with these materials.
- Avoid skin contact.
- Wash hands thoroughly with soap and cool water.
- Never wash the skin with a solvent.
- Anyone experiencing difficulty breathing when working with these materials or showing an allergic reaction should seek fresh air immediately and consult a physician if symptoms persist.

#### **DISCLAIMER:**

Fibrex Construction Chemicals pvt. ltd. products though are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Fibrex wishes to clarify that any advice, recommendation, specification or information is accurate and correct, though it cannot, at any time assume any liability either directly or indirectly arising from the use of its products. This is because it has no direct or constant control over where or how its products are applied, and whether or not in accordance with the advice specification, recommendation or information given by it.

















