# MITCH FLOOR PU SLF

# Poly Urethane Self Level Flooring



## **DESCRIPTION**

MITCH FLOOR PU SLF is four packs, heavy duty polyurethane based, self-level floor product. It can be applied from 3mm up to 6mm in thickness. MITCH FLOOR PU SLF provides a protective floor finish suitable for applications in wet and dry process environments. It is dense and impervious, providing the ideal floor finish for applications in the food and beverage, pharmaceutical and chemical industries and wherever a robust, long lived floor is required.

## **USES**

MITCH FLOOR PU SLF is recommended for conditions requiring the maximum chemical resistance and where a smooth, even and easy to clean surface is required.

Specific applications include:

- Laboratories
- Showrooms
- Hospitals
- Textile factories
- Kitchens
- Electronic component manufacturing
- Aerospace products production
- Automotive Industry
- Food & beverages production units
- Breweries & wineries
- Meat & poultry process areas
- Sugar & confectionery areas
- Printing and pharmaceutical plants
- Ware house etc.

# **BENEFITS**

- Tough & Attractive, enhances working environment
- Seamless and hygienic finish, no crevices where dirt and bacteria can dwell.
- Hygienic easy to clean (can be steam cleaned).
- Non-tainting, non-dusting, abrasion resistant.
- Excellent chemical resistant to acids, sugar & animal fats.
- Easy to maintain, solvent free, low odor.
- Economical and Fast installation & curing.
- Tolerant to substrate moisture.
- Highly impact and thermal shock resistant.
- Pre-packed
- Rapid Access: 8 hours to foot traffic and 24 hours to vehicle traffic.
- Durable and long life

## **COVERAGE**

250 Grams / SFT / mm thickness.

## **PACKAGING**

20 kg packs, consisting of Base A, Hardener B, Filler & color past.

## **COLOR & FINISH**

Available in standard range of colors.

Batch to batch color variation may occur. Ensure that materials for final application are always drawn from the same batch.

PHYSICAL PROPERTIES	
Compressive Strength (MPa) (BS6319:Part 2)	48-53
Flexural Strength (MPa) (ISO178)	21 N/mm²
Compressive Modulus (MPa) (BS 6319: Part 6)	3250 - 4000
Tensile Strength (MPa) (ISO R527)	9
Concrete Adhesion (BS6319:Part2)	Concrete Failure
Abrasion Resistance (Taber H22) (Taber CS17)	1410 mg 120 mg
Coeff. Thermal Expansion (ASTM C531)	3.6x10-5 °C-1
Thermal Conductivity (BS874)	0.9 W/m°C
Slip Resistance EN 13036 (4S Rubber) DIN 51130	35 R10
Surface Resistivity (BS2050)	2x10 <sup>11</sup> ohms
Density (BS6319:Part)	1970 kg/m³
Water Adsorption (CP.BM 2/67/2)	0 mL
Fire Testing (EN 13501: Part 1)	B <sub>FL</sub> – S <sub>1</sub>
Service temperatures 6 mm 4 mm	- 25°C to 80°C - 15°C to 60°C*

Samples cured for 28 days at 20°C. The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions.

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MITCH FLOOR PU SLF offers exceptional resistance to a wide range of chemical aggressors. For example MITCH FLOOR PU SLF is resistant to spillages of the following commonly encountered classes of chemicals:

Most dilute and concentrated organic acids such as, Acetic Acid, Lactic Acid, Oleic Acid and Citric Acid as commonly found in the food industry,

Dilute and concentrated acids: hydrochloric, nitric, phosphoric and sulphuric.

Dilute and concentrated alkalis, including sodium hydroxide to 50% concentration

Animal fats and vegetable oils, sugars flavorings and essences.

Mineral oils, kerosene, gasoline and brake fluids

A wide range of organic solvents including Methanol, Xylene, Ethers and Chlorinated solvents

Note: some staining or discoloration may occur with some chemicals, depending upon the nature of the spill-age and the standards of housekeeping employed.

# SUBSTRATE MOISTURE TOLERANCE

MITCH FLOOR PU SLF Industrial Flooring is extremely tolerant to residual substrate moisture and can be installed directly onto 28 day old concrete, or onto old good quality concretes with high moisture contents without the use of special primers, pro-vided there is a functioning DPM within the structure.

This enables rapid construction programs to be maintained and facilitates refurbishment work in wet process areas.

Epoxy surface DPMs should not be used as they soften under high temperature conditions and will lead to floor failure.

# **IMPACT RESISTANCE**

With high mechanical strengths and a low elastic modulus, MITCH FLOOR PU SLF is very resilient and able to withstand severe impact loads. While no material is indestructible and surface chipping may occur, brittle modes of failure resulting in cracking and debonding are unknown with MITCH FLOOR PU SLF floors.

# **UV RESISTANCE**

The MITCH FLOOR PU SLF resin systems have been formulated to provide the very highest chemical and heat resistance. UV exposure though not affecting the performance of the MITCH FLOOR PU SLF will result in yellowing of the floor which is most apparent in light colors.



# SPECIFICATION SURFACE PREPARATION

All residues must be removed to provide a dry, dust free open textured surface. Damaged areas / cracks in substrate and moving joints should be leveled with proper sealants. If substrate movement occurs after application **MITCH FLOOR PU SLF** will reflect the cracks.

Concrete or screed substrate should be a minimum of 25 N/mm² and minimum tensile strength of 1.5 Mpa, above 10 °C, free from laitance, dust and other contamination.

Preferably use vacuumed shot blasting method for surface preparation. Scrabbling, grit lasting, surface grinding methods may also be used but care is required as they might be less effective. The use of chemicals e.g. acid etching is not advisable.

#### **PRIMING**

MITCH FLOOR PU SLF shall be applied to a cured scratch coat of MITCH FLOOR PU SLF of 1 mm nominal thickness.

#### MIXING

The A-component must be stirred for 1 minute. Then the entire content of the B-component is emptied into the A-component. The two components are homogeneously mixed for at least 1 minute using a suitable electric stirrer. Pour the color pigment into mix. The inclusion of air in the stirring process must be avoided. Add Component **C** (filler) in portions mixing well prior to each addition. The total mixing time should not exceed 3-4 minutes.

# **APPLICATION**

Spread MITCH FLOOR PU SLF to the required thickness using a notched trowel. Immediately after spreading, MITCH FLOOR PU SLF should be rolled with a spiked roller to remove air bubbles.

## **AFTERCARE - CLEANING AND MAINTENANCE**

Clean regularly using a single or double headed rotary scrubber drier in conjunction with a mildly alkaline detergent.

# **HEALTH & SAFETY**

Some of the components of this product may be hazardous during mixing and application, please take all precautionary measures to avoid any contact with eyes, mouth, skin and foodstuff. For further information consult the relevant health & safety data sheets.