

MITCHFLOOR SLF

Solvent Free Self-Leveling Epoxy Flooring



DESCRIPTION

MITCHFLOOR SLF is three packs, single color, and solvent free hygienic self-smoothing resin floor system.

MITCHFLOOR SLF is designed to provide continuous protection for concrete floors between 1.0 - 4.0 mm thicknesses.

MITCHFLOOR SLF comprises a colored resin, hardener system and pre-packed blended aggregate.

The cured **MITCHFLOOR SLF** produces a dense, colorful, and glossy surface.

MITCHFLOOR SLF may also be applied to glazed and terrazzo tiles, steel and timber. For applications other than to concrete, please contact our technical team.

USES

MITCHFLOOR SLF is ideal for dry process areas where the floor is subjected to medium to heavy duty trolley, pallet truck and rubber wheeled fork lift traffic.

The smooth, ultra-dense and high gloss finish is ideal for situations requiring a hygienic, easily cleaned surface.

Typical uses include

- Laboratories & Hospitals
- Showrooms & Retail Store
- Textile Factories
- Commercial Kitchens
- Warehouses
- Electronic Production Plants
- Aerospace / Aviation Production Plants
- Automotive Production Plants & Workshops
- Food & Beverages Production Plants
- Printing And Pharmaceutical Plants
- Schools
- Engineering assembly lines
- Hotels
- Power Plants
- Electric Panel Rooms / Substations
- Paints and chemical plants
- Cement Plants,
- Atomic Power Generation Plants
- Cold Storages
- Tobacco Processing Units
- Meat Processing Units

The above list is not a full and comprehensive. It's just to give and share an idea. For application in industries not included in above list, contact our technical team.

For use in areas that are subjected to heavy mechanical impact and abrasion, contact our technical team.

BENEFITS AND FEATURES

- Self Levelling, solvent free, low odor.
- Colorful & Attractive, enhances working environment
- Seamless And Hygienic Finish, no crevices where dirt and bacteria can dwell (Antimicrobial).
- Non-tainting, non-dusting, abrasion resistant.
- Hard wearing floor finish
- Abrasion resistant
- Antistatic version also available
- Excellent chemical resistant to acid and sugar.
- Easy to maintain & easy to clean.
- Economical and Fast installation.
- Ideal for preparing slip resistant epoxy floor.

COVERAGE

125 Grams / SFT at 1 mm thickness
290 Grams / SFT at 2 mm thickness
430 Grams / SFT at 3 mm thickness
600 Grams / SFT at 4 mm thickness

PACKAGING

20 kg packs, consisting of Base A, Hardener B and Filler C.

COLOR & FINISH

Available in standard range of colors in Gloss / textured (back rolled) finish.

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

SURFACE PREPARATION

Concrete or screed substrate should be a minimum of 25 N/mm² and above 10 °C, free from laitance, dust and other contamination. The moisture content should be less than 5% and free from rising damp and ground water pressure. Waterproofing products can be incorporated directly beneath the **MITCHFLOOR SLF** system.

Floors to be coated or overlaid should be at least 28 days old. Expansion, control and isolation joints in

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concrete substrates should be carried through epoxy floors and filled with a suitable sealants later on.

All residues must be removed to provide a dry, dust free open textured surface.

Any appropriate method for dry grinding and dry cleaning of substrate can be adopted at site as preparations.

Do not wash with water in any case as surface preparations.

PRIMING & SEALING

All kind of substrates require at least one coat of **MITCHEPO PRIMER**. Porous substrate may require two coats.

Damaged areas / cracks in substrate should be leveled with **MITCHFLOOR EP (EPOXY SCREED)**. In case of development of cracks in the substrate, may reflect through applied **MITCHFLOOR SLF**.

MIXING

In hot areas **MITCHFLOOR SLF**, before mixing should be stored under cover in an air-conditioned environment and protected from extremes of temperature which may cause inconsistent workability, finish and cure times for the mixed material.

The A-component must be stirred for 2-3 minutes. Then the entire content of the B-component is emptied into the A- component. The two components are homogeneously mixed for at least 2-3 minutes using a suitable electric stirrer. The inclusion of air in the stirring process must be avoided. The mixture should be poured into another container and briefly stirred again. Add Component **C** in portions mixing well prior to each addition.

Always keep the mixing time the same for all batches, to ensure a uniform color when the product is applied. A slow speed mixer must be used. Ensure that the mixing vanes are below the surface of the mix to minimize air entrapment. The stirrer mixing vane configuration should be such as not to introduce unwanted aeration. Also, for this type of mixing, transferring the base/activator combination to a new container i.e. "re-mixing" will eliminate contamination due to unmixed base which is inclined to cling to the walls of the original container.

MITCHFLOOR SLF system supplied in pre-weighed packs which should not be split or divided. It is important to use complete packs.

APPLICATION

Pour a bead of mixed **MITCHFLOOR SLF** in the form of a ribbon on onto the primed and sealed surface. Do not leave material in the container too long because it will set faster thus reducing the work life.

Spread **MITCHFLOOR SLF** to the required thickness using a pin screed, notched trowel, or steel float. Apply as evenly as is possible, working from left to right, and then back.

Immediately after spreading & leveling, **MITCHFLOOR SLF** should be rolled with a spiked roller to remove air bubbles and trowel marks.

The applicator should always wear spiked shoes when using the spiked roller so that he can walk in the wet material. Rolling should stopped before the **MITCHFLOOR SLF** begins to gel.

MITCHFLOOR SLF can be applied as seal coat on broad cost system / anti slip for wet process areas and car parking.

CLEANING OF TOOLS

Immediately after application is completed clean all tools and equipment with epoxy thinner. Hardened material can only be removed by mechanical means.

TOOLS / SAFETY

- Gloves, Safety Goggles & Overalls
- Masking tape & polythene sheets
- Grinder, Industrial vacuum,
- Heaters for cold weather work
- Trowels
- Lighting
- Slow speed drill with suitable paddle
- Spiked roller, Pin screed
- Brushes or short nap hair rollers
- Spiked shoes

(A) TECHNICAL DATA

Liquid Mixture (A+B+C)

Solids content	99 %
Solvents / additives	1 %
Density (20°C)	1.56 kg/L
Viscosity (20°C)	2000–3000 mPas
Processing time (20°C)	20–25 min.
Processing temperature	15–25°C (min. 3°C above dew-point)

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SPEED OF CURE

	10 °C	20 °C	30 °C
Pot Life	80 min	40 min	25min
Light traffic	48 hrs.	24 hrs.	24 hrs.
Full traffic	72 hrs.	48 hrs.	48 hrs.
Full chemical cure	12 days	7 days	7days

(B) TECHNICAL DATA

Cured Material	
Adhesive pull off strength (DIN ISO 4624)	> 3.5 N/mm ²
Abrasion resistance (DIN 53754 / ASTM D 1044)	80 mg /1000 cycles
Shore-D-hardness (DIN 53505 / ASTM D 2240)	80
Light-fastness (DIN EN ISO 105-B02)	6 (Scale 1–8, 8=best)
Bending tensile strength (DIN EN 196 / ASTM C 190)	40 N/mm ²
Compressive strength Day 3 (DIN EN 196 / ASTM C 109)	52 N/mm ²
Consecutive layers (20°C)	Within 12–24 hours.
fully capable of withstanding stress mechanical (20°C) chemical (20°C)	after 7 days after 28 days

SYSTEM PERFORMANCE GUIDE

The table shows how well the system complies with different characteristics. Complies with BS 8204-6/FeRFA category 5. 5 Excellent, 4 Very Good, 3 Good (Pass), 2 Fair, 1 Poor

Fire Safety	4	Impermeability	5
Slip Resistance	3	Clean ability	5
Impact Resistance	4	Wear Resistance	4
Thermal Resistance	3	Chemical Resistance	3
Heavy Traffic	5	Scratch Resistance	3

AFTERCARE - CLEANING AND MAINTENANCE

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

PRECAUTIONS

During application in cold weather, correct conditioning is essential, application should be halted if the ambient or substrate temperature is likely to fall below 10 °C. Consideration should be given to the substrate or base slab as it is likely to be considerably colder than the surrounding air temperatures. When temperatures exceed 35 °C, working times will be reduced significantly.

If working indoors or in confined spaces, ensure adequate ventilation.

MITCHFLOOR SLF is flammable in wet form. Avoid flames in vicinity. Do not smoke.

In case of fire, blanket flames with foam, carbon dioxide or dry chemicals. Cured **MITCHFLOOR SLF** is inert and harmless.

As common with all epoxies this product may chalk on exposure to direct sunlight.

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. The use of barrier creams provides additional skin protection. If contact with skin occurs, wash with water and soap. DO NOT USE solvent or thinner.

Splashes into eyes should be washed immediately with plenty of clean water and medical advice sought.

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst Mitchell Construction Chemicals endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot - because Mitchell has no direct or continuous control over where and how Mitchell products are applied - accept any liability either directly or indirectly arising from the use of Mitchell products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.