

UNICHEM FLOOR ESF

SOLVENT FREE HIGH BUILD EPOXY RESIN BASED FLOORING SYSTEM

UCA-FC-01-0722

DESCRIPTION

UNICHEM FLOOR ESF is a solvent free system based on epoxy resins and curing agents specially selected for their ability to withstand chemical attack. The system consists of pre-weighed base and hardener components and color pack, all of which contain reactive elements that are essential to the installation of the system.

A skid resistant texture can be provided by the use of one of a range of UNICHEM NON-SKID AGGREGATES which have been carefully designed to ensure an even texture

USES

- ❖ UNICHEM FLOOR ESF provided a hard wearing, chemical and abrasion resistant floor finish. It is ideally suited for use in wet areas where a high degree of resistance to chemicals, oils and grease is required.
- ❖ It is used in production assembly areas, workshop, dairies, soft drink production & bottling plant, kitchen, car showroom, carparks etc. Particularly suited for wet work areas or areas of strong chemical attack.

ADVANTAGES

- Slip resistant – different textures available to suit conditions to avoid slipping
- Available in a wide range of colors to improve the working environment and identify slip hazard areas.
- Specially formulated for use in Middle East conditions.
- Excellent adhesion to concrete, sand/cement and granolithic screeds and metal surfaces.

- Durable, low maintenance costs.
- Proven against a wide range of industrial chemicals.
- Hygienic, highly resistance to Bacterial and fungal growth.
- Solvent free – no odor during application.
- Liquid applied providing complete protection.

TYPICAL PROPERTIES

PROPERTY	RESULT
COLOUR	AVAILABLE IN LIGHT GREY
PACKAGING	10 & 20 Litre Kit
COVERAGE*	4 to 5 m ² /l *The exact coverage will depend upon the porosity, smoothness of surface, wastage and application method
MIX RATIO (BY WEIGHT)	5:1
WET FILM THICKNESS (W.F.T)	200 - 250 microns per coat
MINIMUM APPLICATION TEMPERATURE	5°C

PROPERTY	20°C	30°C
POT LIFE	40 MINUTES	20 MINUTES
RECOATABLE AFTER	36 HOURS	15 HOURS
INITIAL HARDNESS	24 HOURS	18 HOURS
RESISTANCE TO CHEMICAL SPILLAGE	7 DAYS	5 DAYS
SHORE D HARDNESS	85	

*The values given above for typical properties are average figures achieved in laboratory controlled conditions Actual values obtained on site may show minor variations from those quoted.

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CHEMICAL RESISTANCE

It has excellent resistance to most aqueous systems, sewage, urine, fresh water, sea water, alkalis, diluted acids, mineral oils, vegetable oils & fats, ammonia and formaldehyde

INSTRUCTIONS FOR USE

SURFACE PREPARATION

It is essential that UNICHEM FLOOR ESF is applied to sound, clean, dry substrates in order to achieve maximum adhesion between the floor coating and substrate. The long term durability of any resin floor system is determined by the adhesive bond achieved between the flooring material and the substrate. It is most important therefore that substrates are correctly prepared prior to application.

NOTE: UNICHEM FLOOR ESF should not be applied onto surfaces known to, suffer from rising damp or having a relative humidity greater than 75% as measured in accordance with BS 8203 Appendix A.

New Concrete Floors: New floors should normally be at least 28 days old and give a hygrometer reading not exceeding 75% RH when tested in accordance with BS 8203 Appendix A. Dry removal of laitance by light grit blasting is preferable but where this is not feasible thoroughly treat with UNICHEM ACID ETCH, followed by thorough rinsing with water and complete drying. Dust/debris should then be removed by vacuum brush

Old Concrete Floors: A sound clean substrate is essential to achieve maximum adhesion. Oil and grease penetration should be removed by chemical degreaser followed by light grit blasting or acid etching as for new floor. Steel Substrates: Steel substrates should be shot blasted to SA2 ½ surface quality (BS 4232 - Second Quality) and primed with UNICHEM PRIMER EP 100.

PRIMING

Very porous surfaces or surfaces which are damp (RH75/85%) should be primed with one coat of UNICHEM PRIMER EP 100. The primer should be left to achieve a tack – free condition before applying the top coat. A second coat of primer may be required if the substrate is excessively porous.

MIXING

Before mixing the contents, each can should be thoroughly stirred to disperse any settlement which may have taken place. The entire contents of the hardener can should be poured into the base container and the materials thoroughly mixed for at least 3 minutes. Mechanical mixing using a slow speed (300-500 rpm) drill fitted with a mixing paddle is recommended.

APPLICATION

Apply a first coat of the mixed UNICHEM FLOOR ESF to the dry, prepared substrate making sure a continuous film is achieved using a standard paint brush or good quality lambswool roller. Ensure that loose hairs on the roller are removed before use. A minimum film thickness of 200 microns should be applied. This can be increased where specifications demand. When the base coat has reached initial cure (12 hours @ 20°C or 5 hours at 35°C). The top coat can be applied by medium haired roller, at minimum film thickness of 200 microns. Care should be taken to ensure that a continuous film is achieved

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NON-SKID AGGREGATE APPLICATION

If a slip resistant texture is required, the base coat shall be applied as per the standard application, but at a minimum film thickness of 250 microns. The base coat should then be dressed with the chosen UNICHEM NON SKID AGGREGATE. This should be done as soon as possible after laying. The recommended procedure is to completely blind the base coat i.e. apply excess dressing aggregate to completely obliterate the base coating.

When the base coat has reached initial cure (12 hours @ 20°C or 5 hours @ 35°C), the excess aggregate should be vacuum cleaned from the surface. The top coat can now be applied by medium haired roller, at a rate of 4.0 m²/ltr. Care should be taken to ensure that a continuous film is achieved and the rough surface, caused by the aggregate, is completely sealed. This top coat must be applied within 36 hours @ 20°C (15 hours @ 35°C) of the application of the first coat.

Expansion Joints: Expansion joints in the existing substrate must be retained and continued through the UNICHEM FLOOR ESF topping.

CLEANING

Spillages of component products should be absorbed on to earth, sand or other inert material and transferred to a suitable vessel. Disposal of such spillages or empty packing should be in accordance with local waste disposal regulations. Clean tools & equipment with UNICHEM THINNER/solvents immediately after use.

STORAGE & SHELF LIFE

Minimum 1 year in original sealed containers at 25°C. The product should be kept in a cool and well ventilated place, protected from heat and direct sunlight. Containers must be tightly closed.

Stir the contents before use.

SAFETY PRECAUTIONS

It should not come in contact with skin and eyes or be swallowed. Avoid inhalation of solvent vapours. Some people are sensitive to epoxy resins, hardeners and solvents. Gloves, goggles and barrier cream should therefore be used. Ensure adequate ventilation and if working in enclosed areas, suitable breathing apparatus is recommended. If mixed resin comes in contact with skin it must be removed before it hardens with a resin removing cream or with soap and water. DO NOT USE SOLVENT. Contamination of skin with any of the above component products should be removed immediately with soap and water. Should accidental eye contamination occur with any of the above products, wash well with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - DO NOT INDUCE VOMITING.

LIMITATION OF LIABILITY

This information is based on our current level of knowledge. It is given in a good faith but it is not intended to guarantee any particular properties. The users must satisfy themselves that there are no circumstances requiring additional information or precautions or the verification of details given herein.

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