

KUT FLOOR COATING GP SF

Solvent Free, High Build, Epoxy Resin Floor Coating

FLR-09-1012



DESCRIPTION

KUT FLOOR COATING GP SF 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 colour pack, all of which contain reactive elements that are essential to the installation of the system.

A slip resistant texture can be provided by the use of one of a range of **KUT SILICA SAND** or **KUT SILICA QUARTZ** which have been carefully graded to ensure an even texture.

USES

KUT FLOOR COATING GP SF 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 such as:

- Dairies and hospitals
- Soft drinks production facilities
- Chemical manufacturing plants
- Car parks and workshops

ADVANTAGES

- Durable, low maintenance costs.
- Proven against a wide range of industrial chemicals.
- Hygienic, highly resistance to Bacterial and fungal growth.
- Solvent free – no odour during application.
- Slip resistant – different textures available to suit conditions to avoid slipping.
- Liquid applied providing complete protection.
- Available in a wide range of colours 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.

TYPICAL PROPERTIES

The following values were obtained when tested at 20°C and 30°C.

	@20°C	@ 30°C
Pot life	40 mins	20 mins
Cure time	24 hours	18 hours
Maximum time between coats	36 hours	15 hours
Light traffic use after	24 hours	18 hours
Full traffic use after	48 hours	24 hours
Resistance to chemical spillage	7 days	5 days
Compressive strength	70 N/mm ²	
Flexural strength	40 N/mm ²	
Tensile strength	20 N/mm ²	
Water absorption (ASTM C 413)	0.06%	
Shore D Hardness (ASTM C 2240)	85	

CHEMICAL RESISTANCE PROPERTIES

Fully cured **KUT FLOOR COATING GP SF** samples have been tested in a wide range of aggressive chemicals commonly found in industrial environments. Tests were performed in accordance to **ASTM D 543** standards over 168 hours (7days) at 23°+2

Acids	
Lactic acid 10%	Resistant
Citric acid 10%	Resistant
Acetic acid 10%	Resistant
Hydrochloric Acid 50%	Resistant
Sulphuric acid 50%	Resistant
Nitric acid 25%	Resistant
Alkalis	
Sodium hydroxide 50%	
Potassium hydroxide 30%	Resistant
Resistant	
Ammonia (0.880) 10%	Resistant
Solvents	
Petrol	Resistant
Oil	Resistant
Kerosene	Resistant
Butanol	Resistant
Skydrol	Resistant
Industrial Methylated spirits	Resistant
Others	
Saturated sugar solution	Resistant
Urea (saturated)	Resistant
Bleach 5%	Resistant

All the above properties have been determined by laboratory controlled tests and are in excess of those expected in practice.

Nevertheless, success in use will be determined by the implementation of good housekeeping practices.

SPECIFICATION CLAUSE

The epoxy resin floor coating shall be **KUT FLOOR COATING GP SF** from **ASPEC**. The total dry film thickness of the coating shall be minimum of 400 microns and shall have a compressive strength of 70 N/mm², flexural strength of 40 N/mm² and a tensile strength of 20 N/mm², the floor shall be prepared and the coating mixed and applied in accordance with the manufacturer's current data sheet.

INSTRUCTION FOR USE

Surface Preparation: 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.

New Concrete floors: These should normally have been placed for at least 28 days and have a moisture content of less than 5%. Floors should be sound and free from contamination such as oil and grease, mortar and paint splashes or curing compound residues. Excessive laitance can be removed by the use of mechanical methods. Dust and other debris should then be removed by vacuum cleaning.

Old concrete floors: A sound, clean substrate is essential to achieve maximum adhesion. As for new concrete floors dry removal of laitance by use of mechanical methods is preferable. Oil and grease penetration should be removed by the use of a proprietary chemical degreaser or by hot compressed air treatment.

Any damaged areas or surface irregularities should be repaired using **KUT EPOXY MORTAR FC**.

Steel Substrates: Steel substrates should be shot blasted to SA2 ½ surface quality (**BS4232** - Second Quality) and primed with **BOND EP**



مصنع الخصوصية لكيماويات البناء
SPECIALITIES CONSTRUCTION CHEMICALS FACTORY

Marketed by: Alghanim Specialities Co. W.L.L
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PRIMING

Priming is normally required provided the substrate is sound, untreated and good quality nonporous concrete. If any doubts exist of the quality of the concrete, or if it is porous it should be primed with **KUT BOND EP**. Contact **ASPEC** Technical department for advice.

KUT BOND EP should be mixed in the proportions supplied. Add the entire contents of the hardener can to the base can. When thoroughly mixed, preferably using a slow speed drill and paddle, the primer should be applied in a thin continuous film, using rollers or stiff brushes. Work the primer well into the surface of the concrete taking care to avoid ponding or over application.

The primer should be left to achieve a track – free condition before applying the top coat. A second coat of primer may be required if the substrate is excessively porous.

Coating: The base and hardener components of **KUT FLOOR COATING GP SF** should be thoroughly stirred before the two are mixed together. The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly, and then add the colour pot and mix for at least 3 minutes. The use of heavy-duty slow speed, flameproof or air driven drill fitted with mixing paddle is desirable. Mix these components in the quantities supplied taking care to ensure all containers are scraped clean. Do not add solvent thinners at any time.

APPLICATIONS

The first coat of **KUT FLOOR COATING GP SF** should be applied using a good quality medium haired pile roller, suitable for epoxy application, or squeegee to achieve a continuous coating. 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.

Antislip 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 **KUT SILICA SAND** or **KUT SILICA QUARTZ**. 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.

Alternatively, the **KUT SILICA SAND** or **KUT SILICA QUARTZ** can be broadcast in a light random dressing to provide a less dense finish.

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 **KUT FLOOR COATING GP SF** topping. **ASPEC** have a range of joint sealants specifically designed for flooring, contact **ASPEC** Technical Department for advice.

Cleaning: Tools and equipment should be cleaned with **KUT SOLVENT EP** immediately after use. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations.

LIMITATIONS

KUT FLOOR COATING GP SF should not be applied on to surfaces known to, or likely to suffer from, rising dampness, potential osmosis problems or have a relative humidity greater than 75% as measured in accordance with BS 8203 Appendix A, or by a Hammond concrete / mortar moisture tester type COCO.

ASPEC does not recommend acid etching as a method of floor preparation. If used, the method should be approved by the project consultant.

In common with all epoxy materials, some slight shade changes may

be experienced over the long term when placed in adverse exposure conditions. Any such change in shade is not regarded as being detrimental to performance.

PACKAGING AND COVERAGE

KUT BOND EP:	20 kg pack
KUT FLOOR COATING GP SF:	4.5 litre packs (Including colour pack)
KUT SILICA SAND:	25 kg bags
KUT SILICA QUARTZ:	25 kg bags
KUT SOLVENT EP:	5 litre cans

• Coverage:	
KUT BOND EP:	8 m ² /ltr
KUT FLOOR COATING GP SF(base coat):	5.0 m ² /ltr @ 200 microns wft
KUT FLOOR COATING GP SF (top coat):	5.0 m ² /ltr @ 200 microns wft

• Coverage – Antislip (approx.)

For medium texture	
KUT BOND EP:	8 m ² /ltr
KUT FLOOR COATING GP SF(base coat):	4.0 m ² /ltr @ 250 microns wft
KUT SILICA SAND NO 2* or	
KUT SILICA QUARTZ:	1.25-3 m ² /kg
KUT FLOOR COATING GP SF (top coat):	4.0 m ² /ltr
Estimated system thickness:	1.5-2.0 mm
For fine texture	
KUT BOND EP:	8 m ² /ltr
KUT FLOOR COATING GP SF(base coat):	4.0 m ² /ltr @ 250 microns wft
KUT SILICA SAND NO 3* or	
KUT SILICA QUARTZ:	1.25-3.5 m ² /kg
KUT FLOOR COATING GP SF (top coat):	4.0 m ² /ltr
Estimated system thickness:	0.75-1.5 mm

* Depending on the type of texture required.

Note: Coverage figures given are theoretical – due to wastage factors and the variety and nature of substrates, practical coverage figures may be reduced, this will vary with site and application conditions

STORAGE

KUT FLOOR COATING GP SF has shelf life of 12 months when stored in warehouse conditions below 35°C in the original, unopened packs.

Cleaning and disposal

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.

HEALTH AND SAFETY

KUT FLOOR COATING GP, KUT BOND EP, KUT SOLVENT EP 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.**

Fire: **KUT BOND EP** and **KUT SOLVENT EP** are flammable. Do not expose to naked flames or other source of ignition. No smoking during use. Containers should be tightly sealed when not in use. In the event of fire, extinguish with CO₂ or foam.

Flash points: KUT SOLVENT EP: 33°C

ASPEC endeavours to ensure that any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

Distributor