

Safeguard ECS

Epoxy Floor Coating.



Description

ECS Epoxy Floor Coating is a two part water-dispersed epoxy resin product consisting of a pigmented base resin component and a water-dispersed hardener component. The product is available in white and grey versions. ECS Epoxy Floor Coating can be applied by brush or lambs wool roller to provide a decorative coating which is easily cleaned. The applied coating will protect concrete and is resistant to the penetration of oils and greases. The two part water dispersed product is pre-packaged ready for on site mixing.

Areas of Application

- Floor and wall coatings for kitchens and other food processing areas.
- Warehouse and storage areas.
- Light industrial factory areas to give resistance to foot and light vehicular traffic.
- Treating rising damp problems in solid concrete floors.

Preparation

All contact surfaces must be sound, clean, dry¹ and provide a “light” mechanical key. Remove all loose material, paint, plaster and oily deposits. For best results, light grit blasting is recommended. ECS Epoxy Floor Coating is applied in two coats. It is necessary to provide a fine textured substrate to avoid a non-even appearance to the surface finish.

¹ ECS Epoxy Floor Coating can be applied as a damp-proofing coating to damp substrates as long as they are free from surface water. However, where ECS Epoxy Floor Coating is being used to provide a decorative finish it is important that it is applied to a dry substrate.

Mixing

Successful application of ECS Epoxy Floor Coating depends on thorough and complete mixing of the two components (Part A and Part B).

Pre-mix each of the two components individually. The ECS “Part A” component is supplied in a container which is large enough to receive the “Part B” component and act as the mixing vessel. Pour all of the “Part B” component into the “Part A” container and mix using a slow speed high torque drill with a Grout Stirrer. Mix for at least four minutes, scraping down sides occasionally to ensure complete mixing. **Note that all mixed material must be used immediately and cannot be stored, as it will cure into a resin.**

Application

Apply the mixed ECS in two coats. The use of a brush for the first coat is recommended. For the second coat the use of a brush or a short pile simulated lambs wool roller is satisfactory. The second coat should be applied as soon as the first coat has completely dried, typically 18 to 24 hours. Each coat should be applied as a thin continuous film. Ponding must be avoided as the thickness will entrap water and prevent proper curing.

ECS Epoxy Floor Coating should be applied at ambient and surface temperatures between 10°C and 35°C. For applications outside this range contact our technical department. The ambient relative humidity must be below 85% at all times during the curing period. When working in enclosed areas it is important to create sufficient air flow to maintain the humidity below this value. It is recommended that substrates should not have a moisture content of more than 75% RH. This can be assessed using a hair hygrometer covered with polythene for 24 hours as recommended by BS 8203.

Special Notes When a Decorative Finish is Required

Where ECS Epoxy Floor Coating is being used to provide a decorative surface it should be applied by skilled operatives familiar with the application of epoxy coatings to a high decorative standard. To ensure an even finish, special attention should be paid to:

- Ensuring that the product is applied at an even layer thickness
- Blending in of brushed and rolled areas
- Checking that all product used is from the same batch

Cleaning of Tools

Immediately after use, all tools and equipment should be washed with water. Hardened ECS Epoxy Floor Coating may only be removed mechanically.

Coverage

Approximately 35m² per 5Kg pack – based on one coat. This coverage is based on practical application by roller onto a smooth surface in optimum conditions. Factors such as surface porosity, temperature, humidity, application method and finish required can significantly reduce coverage and should be allowed for when estimating.

Storage

Shelf life is 12 months when kept in dry conditions at a temperature of 5°C to 35°C. Storage at higher temperatures may reduce the shelf life. Store where protected from frost and direct sunlight.

Health & Safety

Full health and safety data are given in Product Safety Data Sheet.

Product Data

Working Time 2 hours at 20°C
 Permissible Application Temp..... +5 to +35°C
 Recommended Application Temp. +10 to +25°C

Tack Free Time..... 18-24 Hours
 Initial Cure..... 36 - 72 Hours
 Full Cure..... 5 - 7 Days

Chemical Resistance

Chemical resistance of Safeguard ECS Epoxy coating once fully cured:

Acids

Hydrochloric Acid (Conc)	Fair
Nitric Acid 25%	Fair
Sulphuric Acid 50%	Fair
Lactic Acid 10%	Fair
Acetic Acid 10%	Fair
Citric Acid 20%	Fair

Alkalines

Sodium Hydroxide 50%	Good
Ammonia 10%	Good

Solvents

White Spirit	Good
Methylated Spirit	Good
Xylene	Good
Butanol	Fair

Oils

Lubricating Oil	Good
Petrol	Good
Skydrol	Fair

Aqueous Solutions

Sodium Hypochlorite (Bleach)	Good
Sugar Solution (Saturated)	Good
Salt (Sodium Chloride Saturated)	Good
Ammonium Sulphate (10%)	Good

It should be noted that the ability of Safeguard ECS Epoxy to resist attack is dependent on the temperature and concentration of the chemicals. If in doubt contact our technical department.