

Episeal

Epoxide Resin Floor Coating


Description

A solvent based, chemically resistant floor sealer, available in clear and a range of attractive colours, designed to seal, dustproof and protect concrete floors and other surfaces against the ingress of dirt, oil, grease and a variety of chemicals. Suitable for areas subjected to foot and light vehicular traffic such as factories, garages showrooms, dairies, kitchens, workrooms etc.

Episeal may also be used as a sealer on resin based screeds where cleanliness is important or where particularly wet conditions are encountered.

Advantages

- Dusting eliminated, along with the associated hazards.
- Chemical resistant.
- Improves working environment.
- Hardwearing, durable and long lasting.
- No primer required.
- Pre-weighed pack for simple mixing.
- Easily and quickly applied by unskilled labour.
- Easily cleaned hence reducing maintenance costs.
- Conforms to EN1504 Part 2.
- Available in a range of attractive colours, including Blue, Tile red, Light/Mid/Slate Grey and Clear.

 0086	
Nufins, Kingston House, 3 Walton Road, Pattinson North, District 15, Washington, Tyne & Wear. NE38 8QA 13 0086-CPD-594215	
EN 1504-2 Surface protection product Coating	
Chemical Resistance	
Hydrochloric acid	No visual defects
Sulphuric acid	No visual defects
Adhesion - concrete	>1.0 MPa
Dangerous substances	Comply with 5.3

Technical Information

Specific Gravity: Clear	1.05
Pigmented	1.20
Wet film thickness: Clear	159 Microns
Pigmented	129 Microns
Application Temperature	5°C to 35°C
Substrate Application Temperature	5°C to 35°C
Flash Point	47°C (117°F)
Solids Content	75-95%
Pot life @ 20°C	45-60 minutes
Pot life @ 5°C	In excess of 4 hours
Initial Hardness	18-24 hours
Full Cure	5-7 days
Coverage	6-8m ² per kilo

Surface Preparation

The surface to be treated should be clean, dry, sound and free from loose materials. New concrete should be at least 28 days old before application. Should the strength or the surface stability of the concrete base be in doubt, then we recommend a trial patch of Episeal be applied to assess its suitability. We recommend vacuum grit blasting or mechanical preparation prior to application. On damaged or worn areas repairs should be made using Epicon Mortar.

Mixing

Part mixing of packs is not advocated. Firstly the base tin should be stirred to disperse any settlement. The entire contents of the hardener tin should be added to the base tin and slowly stirred until thoroughly mixed, taking care not to entrain air into the mix. Care should be taken to prevent unmixed material remaining on the side of the tin. A drill and suitable paddle is recommended for this purpose.



Technical properties of Episeal.

Properties	Standard	Performance Requirement	Declared Value
Appearance			Clear/Pigmented Resin
Coverage			6-8m ² /Kg
Usable life			45-60 Minutes
Dry film thickness			115µm
Full cure			5-7 Days
S.G.			1.05 Clear 1.2 Pigmented
Total solids			75-95 %
Flash Point			47°C (117°F)
Application temperature			5°C to 35°C
Adhesion - concrete	EN1542	>1.0 MPa	>1.5MPa
Capillary Absorption & Permeability to Water	EN 1062-3	W<0.1kg/m ² /hr ^{-0.5}	W<0.01kg/m ² /hr ^{-0.5}
Slip Resistance	EN 13036-4		>40 (Class 1)

Technical data shown are statistical results and do not correspond to guaranteed minima.

Tolerances are those described in appropriate performance standards.

1 N/mm² = 1 MPa

1 kN/mm² = 1 GPa



Chemical Resistance

Performance of Episeal tested by immersion at 20°C against a range of aggressive chemicals.

Acids	
Hydrochloric Acid (conc.)	Fair
Nitric Acid, 25%	Good
Sulphuric Acid, 50%	Good
Lactic Acid, 10%	Good
Acetic Acid, 10%	Fair
Citric Acid, 20%	Good
Alkalines	
Sodium Hydroxide, 50%	Good
Ammonia, 10%	Good
Hydrocarbon Solvents	
White Spirit	Good
Methylated Spirits	Good
Xylene	Good
Butanol	Good
Oils	
Lubricating Oil	Good
Petrol	Good
Skydrol	Good
Aqueous Solutions	
Sodium Hypochlorite (Bleach)	Good
Sugar Solution (saturated)	Good
Salt Solution (saturated)	Good
Ammonium Sulphate, 10%	Good

Note: The ability of Episeal to resist attack is dependant on the temperature and concentration of the chemicals. If in doubt contact Nufins Technical Department.

Application Instructions

The mixed Episeal should be applied to the floor using a brush or roller. Two coats are normally recommended with the second coat being applied as soon as the first can be walked on, certainly within 24 hours. Where the Episeal is to be used in wet work areas a light scatter of kiln dried sand (0.3-1.0mm) can be broadcast at a rate of approximately 3kg/m² into the first coat of resin whilst wet, producing a non-slip finish. Excess sand should be removed before application of the subsequent coating. All equipment should be cleaned immediately after use with Nuwash.

Packaging

Episeal is available in 5kg units, (4.2 Litre).

Sands are available in 25kg bags.

Storage

Episeal can be stored for up to 12 months unopened at normal room temperature. If stored in cold conditions the containers should be warmed prior to use as this will assist mixing and application. Store Episeal away from food stuffs and out of reach of children.

Health & Safety

Product Safety Data Sheets (SDS) are available from Nufins. SDS sheets are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the latest information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product.

Limitations

Applications should only be made when the temperature is at least 3°C above the dew point. Do not apply at temperatures below 5°C or when rain is expected.



Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Technical contacts are available to provide further information and arrange demonstrations.

