



Technical Datasheet
Anti-Static Flow Applied Flooring

PUMANTISTAT E.P.S.L.

DESCRIPTION

Pumantistat EPSL is a medium duty epoxy resin in-situ floor finish designed to provide a smooth, seamless, hygienic surface with good resistance to chemicals, greases and solvents and also complying with anti-static requirements of BS2050.(A.4.1)
Pumantistat EPSL is available in one grade providing typical film thickness of 2—3mm in a restricted range of colours.
Pumantistat EPSL is produced from high quality formulated epoxy resins combined with specially graded conductive quartz aggregates in order to produce excellent durability and electrically conductive qualities.

COMPOSITION

A solvent free, epoxy resin and specially graded conductive aggregates.

APPEARANCE

Smooth gloss coloured finish. Please note that to retain the gloss that regular polishing with a metallised conductive polish will be required. Otherwise the product will scratch down with use this is not detrimental to its performance.

DURABILITY

Pumantistat EPSL exhibits a high order of abrasion resistance and is resilient to minor impact damage

THICKNESS

Nominal 2-3mm.

TYPICAL INSTALLATIONS

Pumantistat EPSL is ideal for use in areas which require additional protection from the build up of static electrical charges. This product is ideally suited for application within areas involving:-

- Electrical component design/manufacture
- Powder processing
- Medical equipment storage and repair
- Explosives handling and storage
- Hospital operating/sterile zones

ANTI-STATIC/CONDUCTIVE PERFORMANCE

The unique technology adopted within Pumantistat EPSL ensures the entire system remains electrically conductive, both across the surface of the system and throughout the system to the earthing substrate. Pumantistat EPSL has been designed in compliance with BS2050(A.4.1.) and meets the requirements specified for both Hospital and industrial flooring applications.

SUBSTRATES

Concrete and grano when utilising Pumantistat primer. Maximum moisture content of Substrate 5% or 75% Rh.

SURFACE PREPARATION

To be assured of maximum adhesion and properties from Resdev resin products the correct surface preparation is essential. Please refer to technical data sheet "Surface Preparation".

APPLICATION CONDITION

Pumantistat EPSL is a liquid applied screed which increases in viscosity as the ambient temperature reduces and therefore becomes more difficult to apply. To ensure the optimum surface finish, an ambient temperature in the range of 15 to 30°C should be provided. The ideal temperature for application is 20°C. Please also note some of the conductive elements will be visible to a greater or lesser degree in the end finish this cannot be exactly controlled but will not affect its performance. It is imperative that consistent mix times are maintained throughout the installation as shading may occur due to the effects of the conductive elements within the mix.

EARTHING PROCEDURE—(Conductive System)

Providing the substrate has intimate contact with underlying ground, no additional earthing requirements will be needed this would be a dissipative system. However in the instance of raised or insulated floor levels, or where a conductive system is required then a network of copper strips should be fixed to the blasted floor surface prior to priming and laying of the Pumantistat EPSL system. The copper strip network may be finally secured to a main earthing frame system. Please note a Dissipative system does not require a copper grid or earthing. If in any doubt as to what is required always adopt the conductive system as the preferred option.

PRIMING

Pumantistat primer should be applied by brush or roller at a typical spreading rate of 220g/m², ensuring the substrate is thoroughly wetted out. The primer should be well worked and then be allowed to dry for a minimum of 16 hours and maximum of 48 hours at 20°C prior to the application of the Pumantistat EPSL. It is imperative that a uniform matt film of the primer is achieved any glossiness or patchiness a further coat should be applied to achieve the matt black finish.

MIXING

Pumantistat EPSL is supplied as a two component product. Pre-mixing of the pigmented resin is recommended to ensure any light settlement is fully re-incorporated within the liquid to form a homogeneous material. The clear hardener component is then poured and fully drained into the resin container and the two liquids mixed until a homogeneous mix is achieved. It is imperative that consistent mixing times are observed due to the potential for shading between mixes as the conductive aggregates contained within are black.

APPLICATION TECHNIQUE

Pumantistat EPSL is spread over the pre-primed surface by means of a steel trowel to the required thickness using the coverage rate stated below as guidance. The applied resin surface is then worked with a spiked roller for 2-3 minutes immediately after laying until an even, level surface is produced.

SPECIFICATION DETAIL

- I) Pumaprime SF—150g/m²
- II) Pumantistat primer – 220g/m²
- III) Pumantistat EPSL at a nominal 2mm (3.6kg/m²) or 3mm (5.4kg/m²)

MAINTENANCE

Providing contamination is not allowed to build up, regular scrubbing and mopping maintain Puma floors satisfactorily.

CURE SCHEDULE

Usable Life at 20° C	-30 mins
Initial set at 20° C	-8-10 hours
Foot traffic at 20° C	-24 hours
Heavy traffic at 20° C	-3-4 days
Full chemical resistance	-10 days

COLOURS AVAILABLE

All standard Resdev colours excluding colours lighter than mid grey. However, dark colours are recommended for best visual results.

TECHNICAL DATA

Compressive strength (N/mm ²)	-36.0
Flexural strength (N/mm ²)	-30.0
Slant shear bond strength (N/mm ²)	-29.0
Mixed density	-1.65
Elastic modulus (kN/mm ²)	-3.00
Surface spread of flame	-class 2
BS 2050(A.4.1)	0.05—100 mega ohms

HEALTH AND SAFETY

Please read specific health and safety data for this product provided in compliance with the requirements of EC Directive 91/155.

STORAGE, MIXING & APPLICATION

The storage, mixing and application conditions can affect the quality of the finish produced. Please read technical data sheet.

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