



**PROTECTIVE
&
MARINE
COATINGS**

Resuflor SL ESD
PRODUCT TECHNICAL DATA
(Formerly known as Resustat ESM)

PRODUCT DESCRIPTION

Resuflor SL ESD is a static-dissipative resin based flooring system which is installed at 3 mm nominal thickness. The formulation comprises of a unique blend of conductive fillers blended with selected epoxy resin components & pigments to provide an attractive and decorative finish. The product is also free from crystalline silica improving the H&S aspect for users. The Resuflor SL ESD flooring system has an electrical conductivity leakage resistance of $<10^9$ ohms when tested to BS EN 61340-4:2004+A1:2015.

ADVANTAGES

- Static-dissipative seamless finish
- Silica free
- Hard wearing durable floor for industrial use
- Ease of application
- Hygienic
- Excellent abrasion and impact resistance
- Good chemical resistance
- Smooth finish for precise operation equipment

RECOMMENDED USE

- Pharmaceutical production
- Electronic industrial areas
- Television studios
- Operating Theatres
- Domestic studios
- Industrial workshops
- Chemical Plants

PRODUCT DATA

Volume Solids:	~100%	Application at 20°C	
VOC:	<92 g/l calculated per full mixed unit	Recoating Intervals:	N/A
Colours:	See Resuflor Colour Chart	Light Traffic:	24 hours
Finish:	Smooth gloss	Full Traffic:	72 hours
Flash Point:	N/A	Full Chemical Cure	7 days
Cleanser/Thinner:	Thinning not recommended	Pot Life:	25 - 30 minutes from mixing, based on 30 kg pack size
Pack Size:	30 kg	<i>The pot life may be shorter for larger pack sizes if the product is not used within the pot life limit.</i>	
Pack Weights:	6.95 kg base/3.05 kg hardener/ 20kg aggregate (30 kg)	Note: All mixed product must be used within the pot life time limit, if the product is left in the container after mixing and not used, it may release hazardous fumes due to exothermic reaction.	
Mixing Ratio:	2.3 parts base to 1 part hardener to 6.5 parts aggregate by weight only	Coverage Rate:	30 kg will cover 5 m ² @ 3mm thickness or 5m ² at 3mm thickness
Mixed Density:	Approximately 1.8 g/cm ³	(Theoretical) Coverage rate is calculated based on a sealed and smooth surface and may vary based on the substrate roughness and other conditions.	
Shelf Life:	36 months (Base, hardener and aggregate) when stored in unopened containers	System Thickness: (Recommended)	2 – 3mm
Storage:	Keep out of direct sunlight. Store in a dry place, between 15°C – 20°C	<i>The suggested thickness range is calculated based on average volume solid as a general recommendation for the specified condition and for each application may vary.</i>	
		Recommended Application Methods:	Trowel, squeegee and spike roller



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SURFACE PREPARATION

New Concrete Floors: New concrete must be clean, sound, dry, fully cured and surface laitance removed by vacuum enclosed shot blasting or mechanical grinding, a minimum strength of 25N/mm² is required.

Existing Concrete Floors: Remove all dirt, oil, grease, old paint or any other surface contaminants by vacuum enclosed shot blasting, scarifying or mechanical grinding. Fats, oils or greases must be removed by mechanical means and detergent washing and making sure all residue of detergent is washed and removed by rinsing with clean water. Local repairs should be carried out using **Resufloor Patch**.

Existing Floors (previously coated): All previous coatings and loose floor paints must be removed by mechanical preparation as described in the above section and primed as specified. If the old resin flooring cannot be removed then please consult with our technical team for advice on intercoat adhesion and suitability, as it may not be compatible with the existing floor coating. Where **Resufloor SL ESD** is applied to masonry/concrete surfaces, care must be taken to ensure that surface preparation is thorough but does not disfigure the surface.

PRIMING

Open and porous substrates may should be initially primed with **Resuseal WB** or **Resuprime ST** used on dry substrates only with less than 75% ERH reading.

Where the Relative Humidity of a substrate exceeds 75% ERH please refer to the table below for required number of coats to achieve proper moisture tolerance.

ERH%	Required Coating Thickness
75-85	1 coat of Resuprime MVT at 200 µm per coat
85-92	2 coats of Resuprime MVT at 200 µm per coat
92-97	3 coats of Resuprime MVT at 200 µm per coat

For further information please refer to recommended individual product data sheets.

Following the application of the initial primer, copper tape strips are laid to form a grid system where the grids are no larger than 2m x 2m. The copper tape should be left exposed in areas to allow them to be earthed properly. Onto this a coat of **Resuprime ESD** is applied to provide a fully conductive layer under the **Resufloor SL ESD**. It is important to take a conductive reading of the cured **Resuprime ESD** before applying the **Resufloor SL ESD**.

APPLICATION CONDITIONS

The ambient temperatures of the areas should not be allowed to fall below 15°C throughout the application and the curing period, as this could have an adverse effect on the appearance and colour of the system. Surface temperature must be above 10°C. Where possible it is recommended that the application area is heated to a minimum temperature of 15°C ideally to allow the ambient and substrate temperature to stabilise prior to the installation.

The surface should be protected from temperatures of less than 10°C and moisture in the early stages of cure. This could adversely affect the flow, levelling and surface finish of **Resufloor SL ESD**.

*See Sherwin-Williams System Guide **Resufloor Topfloor SL ESD** for recommended floor system using **Resufloor SL ESD**.*

MIXING AND APPLICATION

Pre-mix the **Resufloor SL ESD** Base to a uniform colour, then mix the entire contents of base with the **Resufloor SL ESD** Hardener. If a separate mixing bucket is being used ensure all contents of both components are removed from the buckets supplied. Mix using a slow speed electric mixer for approximately one to two minutes until the two components have fully combined then add the aggregate slowly. Mix for a further 1-2 minutes until the aggregate has fully combined and there are no lumps. The mixed unit should be applied immediately.

Resufloor SL ESD should be worked with a trowel or float to achieve an even smooth finish. This is best achieved by the application of smooth even pressure with the compound poured over the correct coverage rate after fixing the stop ends to control the flow of the material. Then roll the area with a spiked roller to achieve an even smooth surface and remove entrapped air. Do not re-roll the area later than 10-15 mins. The surface should be protected from temperatures of less than 10°C and moisture in the early stages of cure. This could adversely affect the flow, levelling and surface finish of **Resufloor SL ESD**.

TECHNICAL INFORMATION

The following figures are obtained from laboratory tests and our experience with this product.

Category Guide:	FerFA Category 5
Bond Strength: (BS EN 13892-8:2002)	>3 N/mm ² (Substrate failure)
Temperature Resistance:	Tolerant of temperatures up to 60°C @ 3 mm Class II
Impact Resistance: (BS EN 1504-2:2004)	
Abrasion Resistance: (BS EN 13892-4:2004)	AR 0.5 (Less than 50 microns wear)
Compressive Strength: (BS EN ISO 604:2003)	38.6 MPa
Flexural Strength: (ISO 178:2010)	24.2 N/mm ²
Tensile Strength: (BS EN ISO 527-2:2012)	9.2 MPa
Reaction to Fire: (BS EN 13501-1:2018)	Cfl-s1
Electrical Resistance: (BS EN 61340-4:2004+A1:2015)	>10 ⁹ Ohms

CE MARK

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16

BS EN 13813 :2002 SR B 3.0 - AR 0.5 - IR>4
Resin coating/screed for use inside buildings as per data
sheet

Wear resistance:	AR 0.5
Bond strength:	B 3.0
Impact resistance:	IR > 4

WARRANTY

Any person or company using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk, and Sherwin-Williams can accept no liability for the performance of the product, or for any loss or damage arising out of such use.

The information detailed in this datasheet is liable to modification from time to time in the light of experience and normal product development, and before using, customers are advised to check with Sherwin-Williams, quoting the reference number, to ensure that they possess the latest issue.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

HEALTH AND SAFETY

Consult Product Health and Safety Datasheet for information on safe storage, handling and application of this product.

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