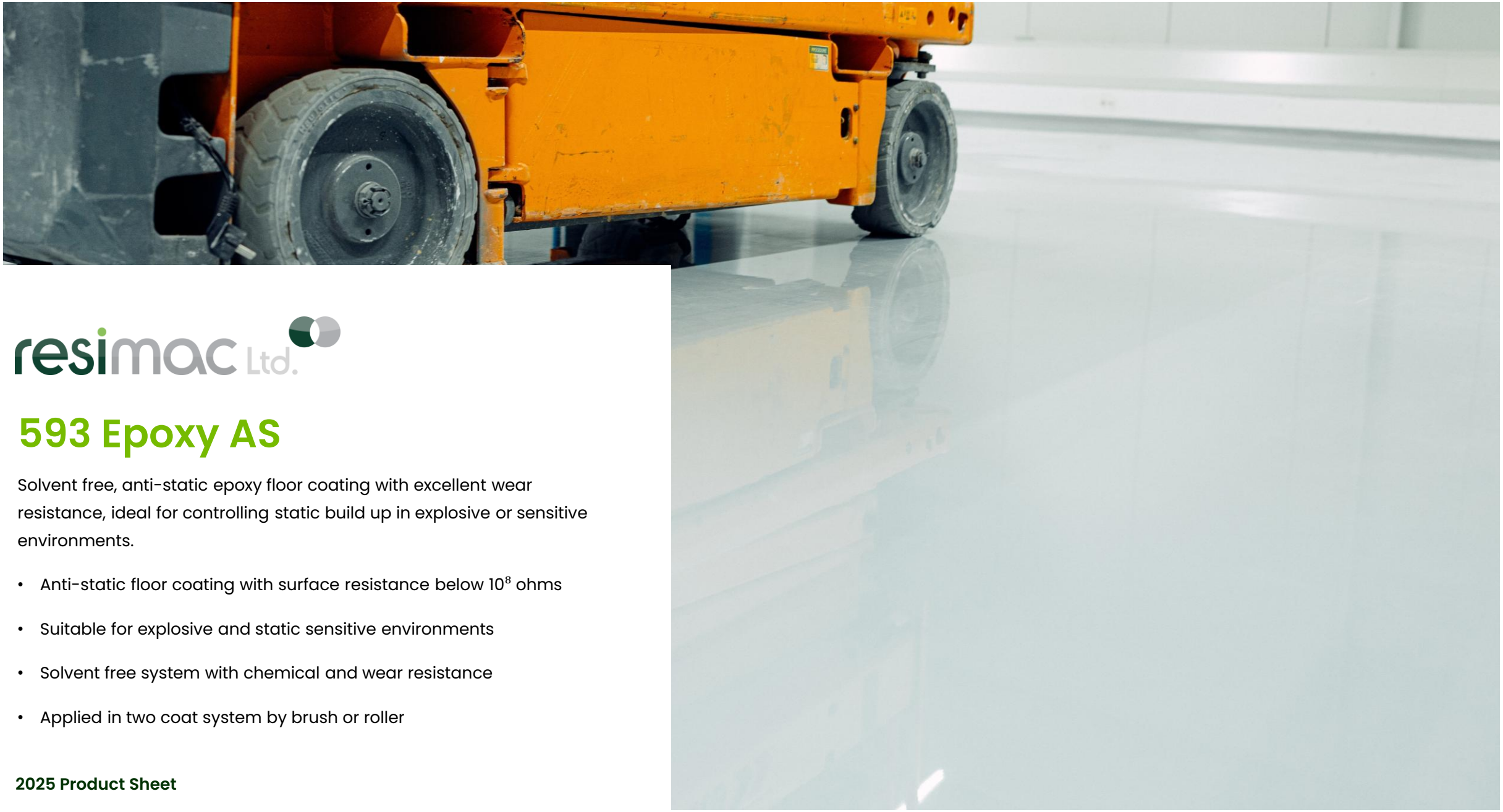

resimac Ltd.

593 Epoxy AS

Solvent free, anti-static epoxy floor coating with excellent wear resistance, ideal for controlling static build up in explosive or sensitive environments.

- Anti-static floor coating with surface resistance below 10^8 ohms
- Suitable for explosive and static sensitive environments
- Solvent free system with chemical and wear resistance
- Applied in two coat system by brush or roller

2025 Product Sheet

Typical Applications

593 Epoxy AS is a high build, solvent free epoxy floor coating designed for static control in sensitive or potentially explosive environments. Formulated to provide a surface resistance of less than 10^8 ohms, the system helps dissipate static electricity, reducing the risk of ignition or equipment malfunction.

- Factory floors
- Laboratories
- Clean rooms

Characteristics

Appearance

Base	Thixotropic liquid
Activator	Amber liquid
Mixed	Thixotropic liquid

Solids Content

100%

Volume Capacity

657cc/kg

Sag Resistance

Nil at 300 microns

Density

Base	1.78
Activator	1.00
Mixed	1.52

Mixing Ratio

By weight	3.5:1
By volume	2:1

Storage Life

5 years if unopened and stored in normal dry conditions, 15-30°C (59-86°F)

Cure times

Usable Life		Min overcoating time		Max overcoating time		Chemical contact	
10°C/50°F	60 mins	10°C/50°F	24 hours	10°C/50°F	36 hours	10°C/50°F	7 days
20°C/68°F	45 mins	20°C/68°F	12 hours	20°C/68°F	36 hours	20°C/68°F	5 days
30°C/86°F	30 mins	30°C/86°F	12 hours	30°C/86°F	24 hours	30°C/86°F	5 days
40°C/104°F	15 mins	40°C/104°F	8 hours	40°C/104°F	16 mins	40°C/104°F	3 days

Coverage

5kg (2.2lbs) of fully mixed product will give the following coverage rates

13m² at 250 microns	140ft² at 10mil

Please note that the coverage rates quoted are theoretical and do not take into consideration the profile or condition of the surface being repaired.

Mechanical Properties

Abrasion Resistance
Taber CS17 Wheels/1kg load
138mg loss/1000 cycles
0.22cc loss/1000 cycles

Compressive Strength
Tested to ASTM D 695
649kg/cm² (9200psi)

Corrosion Resistance
Tested to ASTM B117
Minimum 5000 hours

Flexural Strength
Tested to ASTM D790
522kg/cm² (7400psi)

Hardness
Shore D to ASTM D2240: 80

Adhesion
Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile
160kg/cm² (2275 psi)

Surface resistance
Tested to IEC 60079-0:2011 clause 26.13 2.174 x 10^8 Ohms

Impact Resistance
Tested to ASTM G14 2.0 joules

Heat Resistance
Suitable for use in immersed conditions at temperatures up to 60°C (140°F). Resistant to dry heat up to 180°C (356°F) dependent on load.

Details & Legal

Quality
All Resimac Products are supplied under the scope of the company's fully documented quality system.

Warranty
Resimac warrants that the performance of the product supplied will conform to the typical descriptions quoted within this specification provided material is stored correctly and used according to the procedures detailed in this document.

Chemical Resistance
The product resists attack by a wide variety of inorganic acids, alkalis, salts and organic media including:

Brine	40°C (104°F)
Crude Oil	40°C (104°F)
Diesel	40°C (104°F)
Hydrochloric Acid 10%	40°C (104°F)
Naphtha	40°C (104°F)
Phosphoric Acid 30%	40°C (104°F)
Sodium Hydroxide 30%	40°C (104°F)
Sulphuric Acid 20%	40°C (104°F)

Pack Sizes
This product is available in the following pack sizes:
5kg (2.2lbs)

Application Guide

A. Surface Preparation

Existing Concrete:

1. If the concrete surface is contaminated, pressure wash using clean water.
2. Once the concrete is dry, lightly abrasive blast clean or scarify taking care not to expose the aggregate.
3. Ensure all concrete surfaces are primed prior to applying 593 Epoxy AS.
4. Apply 503 SPEP low viscosity epoxy primer to the surface using brush or roller.
5. Leave to cure for a minimum 3 hours at 20°C (68°F).

New Concrete:

1. Allow new concrete to cure for a minimum of 21 days and treat to remove any surface laitance.
2. Check the moisture content of the concrete prior to coating (8% moisture content or below).
3. Lightly scarify the surface taking care not to expose the aggregate. Clean all dust and debris from the surface.
4. Ensure all concrete surfaces are primed prior to applying 593 Epoxy AS.
5. Apply 503 SPEP low viscosity epoxy primer to the surface using brush/roller.
6. Apply 503 SPEP at a wet film thickness of 150 microns (6mil).
7. Leave to cure for a minimum 12 hours at 20°C (68°F).

Health & Safety

Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn during the mixing and application of this product.

Before mixing and applying the material, please ensure you have read and fully understood all information.

B. Product Preparation

Prior to mixing, please ensure the following:

1. The base component is at a temperature between 15-25°C (60-77°F).
2. The ambient & surface temperature is above 10°C (50°F).
3. The ambient & surface temperatures are not less than 3°C (6°F) above the dew point.

C. Mixing

Mix the complete unit of material (5kg):

1. Transfer the contents of the Activator unit into the Base container.
2. Using an electric paddle mixer, mix the 2 components until a uniform material free of any streaks is achieved.
3. From the commencement of mixing the whole of the material should be used within 45 minutes at 20°C (68°F).

D. Application

Brush or roller applications:

1. Pour the mixed material into a paint kettle or paint tray (this will maximise the usable life).
2. Using a 50mm (2") wide synthetic brush, stripe coat all edges, joints, corners and equipment with the mixed material.
3. The stripe coat must be approximately 100mm (4") wide, at 200 microns (8mil) wet film thickness.
4. Once the stripe coat has cured sufficiently and is capable of being overcoated, apply the 1st coat of mixed product to all surfaces at 250 microns (10mil) wet film thickness.
5. Once the 1st coat of material has cured sufficiently, approximately 12 hours at 20°C (68F°), apply a 2nd coat of material to all surfaces at 250 microns (10mil) wet film thickness.

Quick Application Guide

Step 1

Ensure you have:
1 x base unit
1 x activator unit
1 x slow speed drill & paddle
1 x spatula
1 x brush
1 x medium pile roller

Step 2

Open the activator tin and pour contents into the base unit.

Step 3

Mix the two components using the drill and paddle. Ensure the product is fully mixed check the material for any colour difference.

Step 4

Once the material is fully mixed pour into a roller tray or clean receptacle and apply the product to the substrate using a brush or roller.

Step 5

Allow to cure (12 hours minimum) and apply 2nd coat if required.

About Resimac

A UK based manufacturer of epoxy and polyurethane coatings and repair materials.

From our head office in the heart of rural North Yorkshire, England we supply our range of Epoxy, Polyurethane & Silicone coatings and repair materials to the Oil & Gas, Petrochemical, Marine, Paper & Pulp, Water, Power Generation & Chemical Industries.

Legal Notice

Information & Enquiries

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