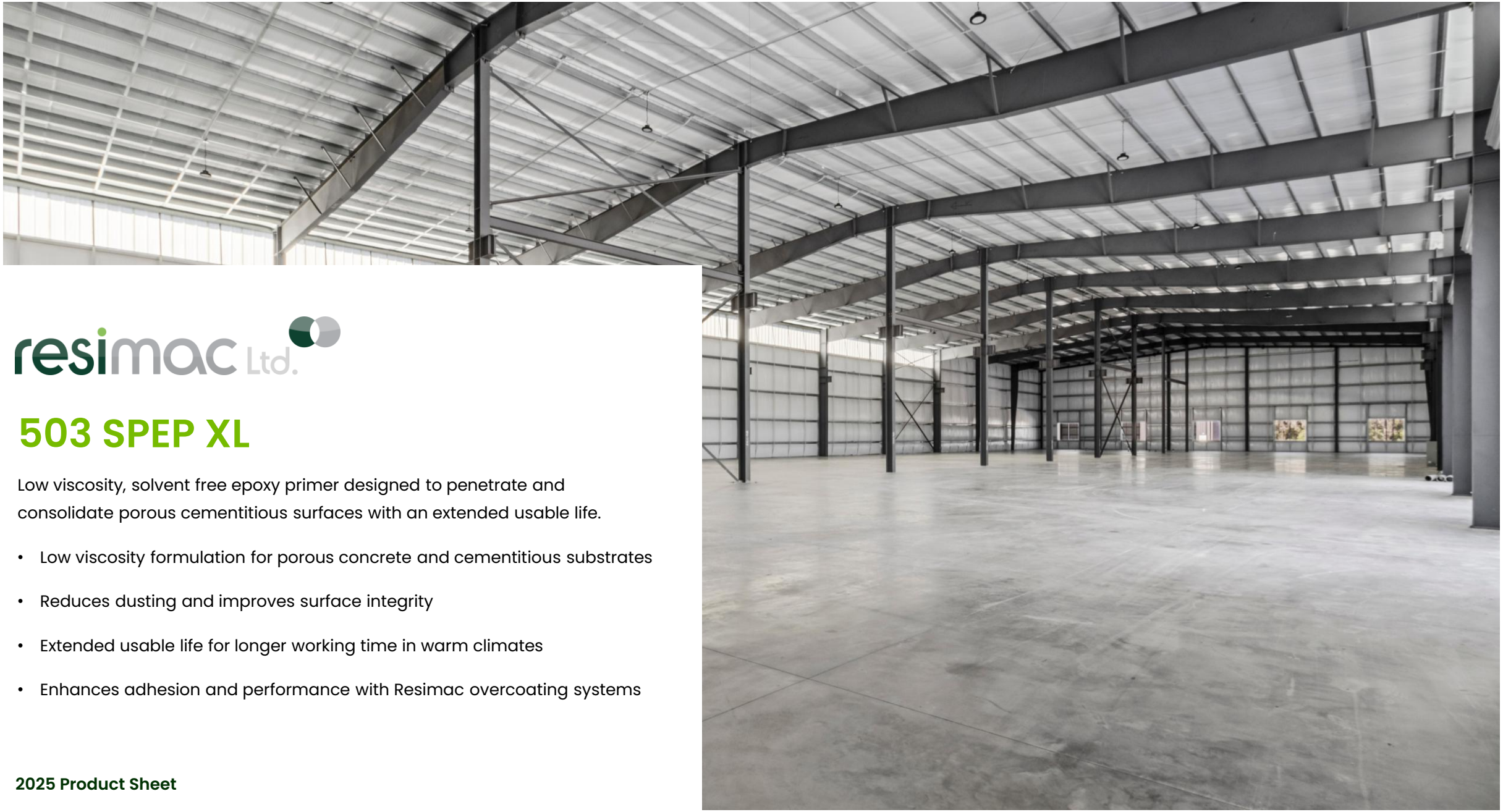

503 SPEP XL

Low viscosity, solvent free epoxy primer designed to penetrate and consolidate porous cementitious surfaces with an extended usable life.

- Low viscosity formulation for porous concrete and cementitious substrates
- Reduces dusting and improves surface integrity
- Extended usable life for longer working time in warm climates
- Enhances adhesion and performance with Resimac overcoating systems

2025 Product Sheet

Typical Applications

503 SPEP XL is a solvent free, low viscosity epoxy primer formulated to seal and consolidate concrete and cementitious substrates. Its extended usable life makes it ideal for large areas or warm climates where longer working time is essential.

- Concrete floors
- Internal and external tank bases
- Structural concrete
- Cementitious screeds

Characteristics

Appearance

Base	Low viscosity pale straw liquid
Activator	Amber liquid
Mixed	Low viscosity pale straw liquid

Solids Content

100%

Volume Capacity

657cc/kg

Sag Resistance

Nil at 250 microns

Density

Base	1.12
Activator	1.00
Mixed	1.08

Mixing Ratio

By weight	1.65:1
By volume	1.5:1

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	
10°C/50°F	100 mins	10°C/50°F	16 hours	10°C/50°F	72 hours
20°C/68°F	50 mins	20°C/68°F	8 hours	20°C/68°F	36 hours
30°C/86°F	25 mins	30°C/86°F	4 hour	30°C/86°F	18 hours
40°C/104°F	12.5 mins	40°C/104°F	2 hours	40°C/104°F	9 hours

Coverage

4ltrs (1.1 US gallon) of fully mixed product will give the following coverage rates

26.6m² at 150 microns	286ft² at 6mil
15 ltrs (4 US gallon)	
100m² at 150 microns	1075ft² at 6mil

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

Compressive Strength
Tested to ASTM D 695
629kg/cm² (8945psi)

Flexural Strength
Tested to ASTM D790
371kg/cm² (5275psi)

Hardness
Shore D to ASTM D2240 84

Heat Distortion
Elcometer pull off adhesion tester
Dry 525psi (cohesive in substrate)
37kg/cm²
Wet 475psi (cohesive in substrate)
33.4kg/cm²

Tensile Shear
Tested to ASTM D1002 on abrasive blasted mild steel with
75 micron profile
201kg/cm² (2860 psi)
On rusted steel
167kg/cm² (2375 psi)

Heat Resistance
Suitable for use in immersed conditions at temperatures up to 60°C (140°F)
Resistant to dry heat up to 150°C (302°F) dependent on load

Details & Legal

Chemical Resistance
The product resists attack by a wide variety of inorganic acids, alkalis, salts and organic media. For more detailed information refer to the Resimac Technical Centre for advice.

Pack Sizes
This product is available in the following pack sizes:
4ltrs (1.1 US Gallon)
15ltrs (4 US Gallons)

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.

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 or scarify taking care not to expose the aggregate.
3. Clean all dust and debris from the surface.

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.
4. Clean all dust and debris from the surface.

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

If mixing a complete unit of material:

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 (4lts/15ltrs):

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 50 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 150 microns (6mil) wet film thickness.

   Once the stripe coat has cured sufficiently and is capable of being overcoated, apply the mixed product to all surfaces at 150 microns (6mil) wet film thickness.

Spray Applications:

1. Spray application should be carried out by airless spray using a 60:1 ratio pump with an attached hot water pump to heat the spray lines.
2. The temperature around the spray lines should be kept around 25-35°C (77-95°F).
3. An input pressure of 60psi and a tip size of 0.025-0.03inches should be used.
4. Use as short a line as possible to maintain product temperature (maximum 8meters/26foot).
5. Circulate the product for a short time to achieve temperature equilibrium.
6. Apply the mixed product to all surfaces at 150 microns (6mil) wet film thickness.
7. It is essential that coated surfaces are back rolled using a medium pile roller to ensure the primer penetrates the substrate.

Quick Application Guide

Step 1

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

Step 2

Pour the entire contents of the activator container into the base container.

Step 3

Mix thoroughly, taking to care to ensure any unmixed base component is scraped down from the edges of the container using a spatula. Continue mixing until a streak free, uniform material is achieved.

Step 4

Apply to the correctly prepared substrate using a brush or medium pile roller to the required wet film thickness of 150 microns (verified using wet film thickness gauge).

Step 5

Allow to cure for minimum of 8 hours. The primer should have a uniform semi-gloss finish, any dull patches are caused by excessive porosity. Any dull patches must be over coated with a 2nd coat at 150 microns WFT.

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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