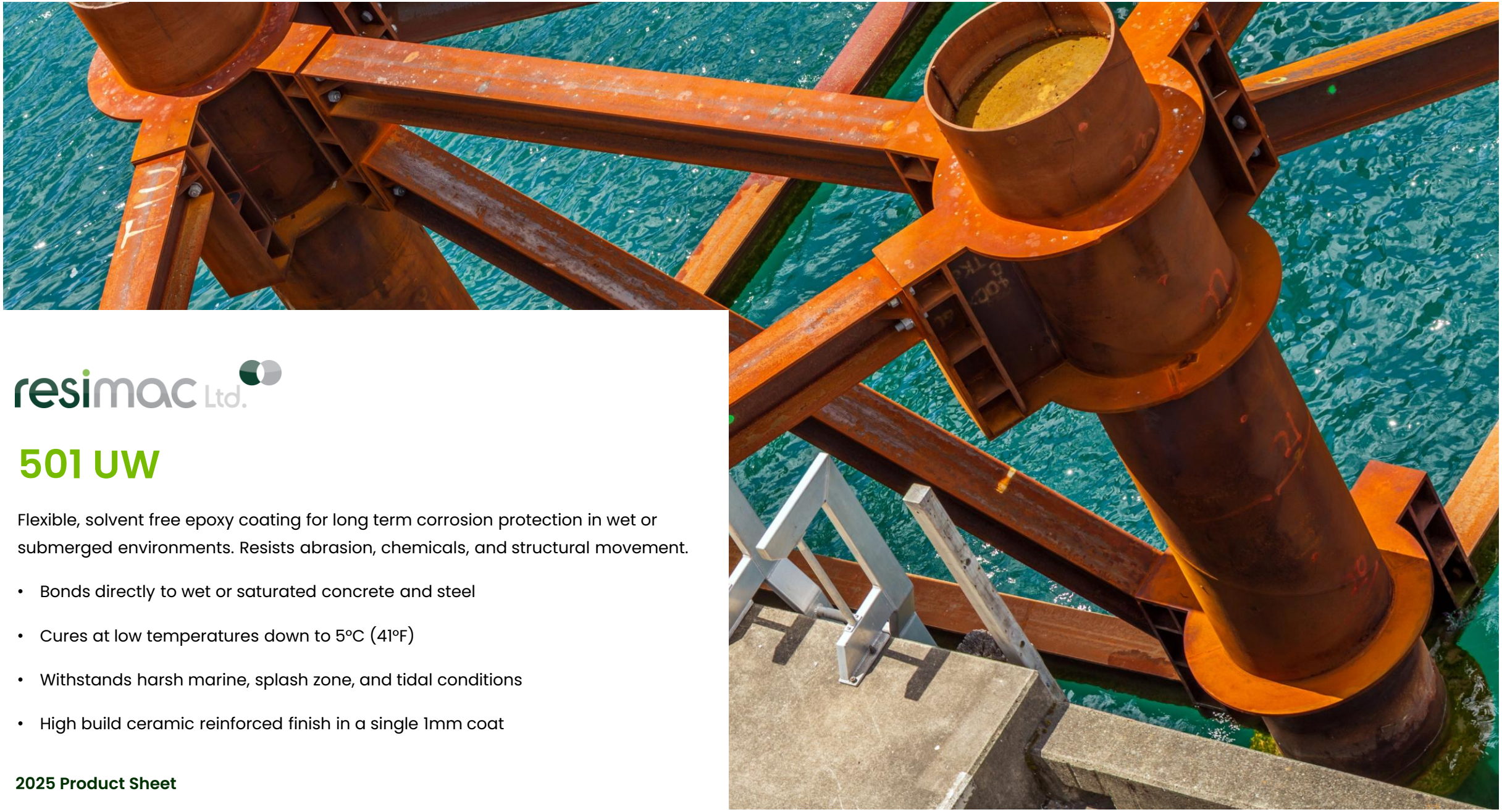


resimac Ltd.

501 UW

Flexible, solvent free epoxy coating for long term corrosion protection in wet or submerged environments. Resists abrasion, chemicals, and structural movement.

- Bonds directly to wet or saturated concrete and steel
- Cures at low temperatures down to 5°C (41°F)
- Withstands harsh marine, splash zone, and tidal conditions
- High build ceramic reinforced finish in a single 1mm coat

2025 Product Sheet

Typical Applications

501 UW is a solvent free, ceramic reinforced epoxy coating formulated for use in persistently wet or submerged environments. Its advanced composition delivers high mechanical strength, chemical resistance, and flexibility, ideal for demanding conditions where structural movement and moisture are constant factors.

- Immersed and tidal zone metalwork
- Offshore pipework and riser systems
- Wave splash and coastal exposure areas
- Steel piles and marine support structures
- Wet or submerged concrete infrastructure

Characteristics

Appearance

Base	Dark Grey
Activator	Amber Liquid
Mixed	Dark Grey Liquid

Solids Content

100%

Volume Capacity

649cc/kg

Sag Resistance

Nil at 1000 microns

Density

Base	1.40
Activator	0.99
Mixed	1.32

Mixing Ratio

By weight	5.6:1
By volume	4:1

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		Full Cure	
10°C/50°F	90 mins	10°C/50°F	12 hours	10°C/50°F	24 hours	10°C/50°F	6 days
20°C/68°F	45 mins	20°C/68°F	8 hours	20°C/68°F	12 hours	20°C/68°F	3 days
30°C/86°F	22.5 mins	30°C/86°F	3 hours	30°C/86°F	6 hours	30°C/86°F	1.5 days
40°C/104°F	11 mins	40°C/104°F	1.5 hours	40°C/104°F	3 hours	40°C/104°F	24 hours

Coverage

5ltrs (1.3 US gallons) of fully mixed product will give the following coverage rates:

5m² at 1000 microns	54ft² at 40mil

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
38mm³ loss/1000 cycles

Compressive Strength
Tested to ASTM D695
66.1mpa (9590psi)

Corrosion Resistance
Tested to ASTM B117
Minimum 1000 hours

Flexural Strength
Tested to ASTM D790
614kg/cm² (8710psi)

Adhesion
Tensile Shear to ASTM D1002 on abrasive blasted dry mild steel with 75 micron profile 184kg/cm² (2610psi)

Tensile Shear to ASTM D1002 on abrasive blasted wet mild steel with 75 micron profile 112kg/cm² (1700psi)

Impact Resistance
Tested to ASTM D256 32J/m

Hardness
Shore D to ASTM D2240:

20°C (68°F)	76

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:
5ltr (1.3 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

Hydro-Blasting: (Recommended method)

1. Ensure the surface is free from algae, barnacles, and other marine organisms before blasting.
2. Use a hydro-blaster capable of delivering a minimum pressure of 3000 psi.
3. Direct the water jet evenly across the surface to remove contaminants, degraded coatings, and corrosion.
4. Ensure all loose material has been removed and the substrate is visibly clean and well prepared.

Manual Preparation:

1. Use scrapers or chisels to eliminate algae, barnacles, and other marine life from the surface.
2. Manually scrape away any degraded coatings or corrosion to expose a stable substrate.
3. Use a rough abrasive pad to further clean and key the surface, improving adhesion.
4. Ensure the surface is free of loose material and contaminants. Note that manual preparation may reduce overall coating performance.

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 water temperature is above 5°C (41°F).

C. Mixing

Mix the complete unit material (5ltrs):

1. Transfer the contents of the Activator unit into the Base container.
2. Using a drill and 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

1. The material has been designed to be applied to underwater surfaces in a single coat at 750 microns (30mil) to 1mm (40mil) wet film thickness.
2. Using the applicator tool provided, the material should be pressed onto the surface.
3. Ensure you do not over work the coating once applied onto the underwater surface, as a general rule if the coating has covered the repair area, then leave it to cure.
4. You can dress or smooth off the coating after a minimum of 4 hours after application using a gloved hand.

PLEASE NOTE: For salt contaminated surfaces the substrate must be pressure washed with clean water and checked for salt contamination, please refer to the surface preparation and pre-application guide for further information.

Quick Application Guide

Step 1

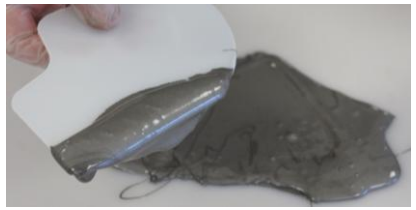
Ensure you have:
1 x base unit
1 x activator unit
1 x spatula
1 x applicator tool
1 x drill and paddle mixer

Step 2

Open the activator tin and pour contents into the base unit. Mix the two components using a drill and paddle mixer.

Step 3

Pay attention to the base and sides of the container while mixing. Once completed you must have a consistent dark grey mix.



Step 4

Using an applicator tool, apply the coating to the repair surface.

Step 5

Leave to cure ensuring you have a pinhole free finish to the steel or concrete surface.

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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