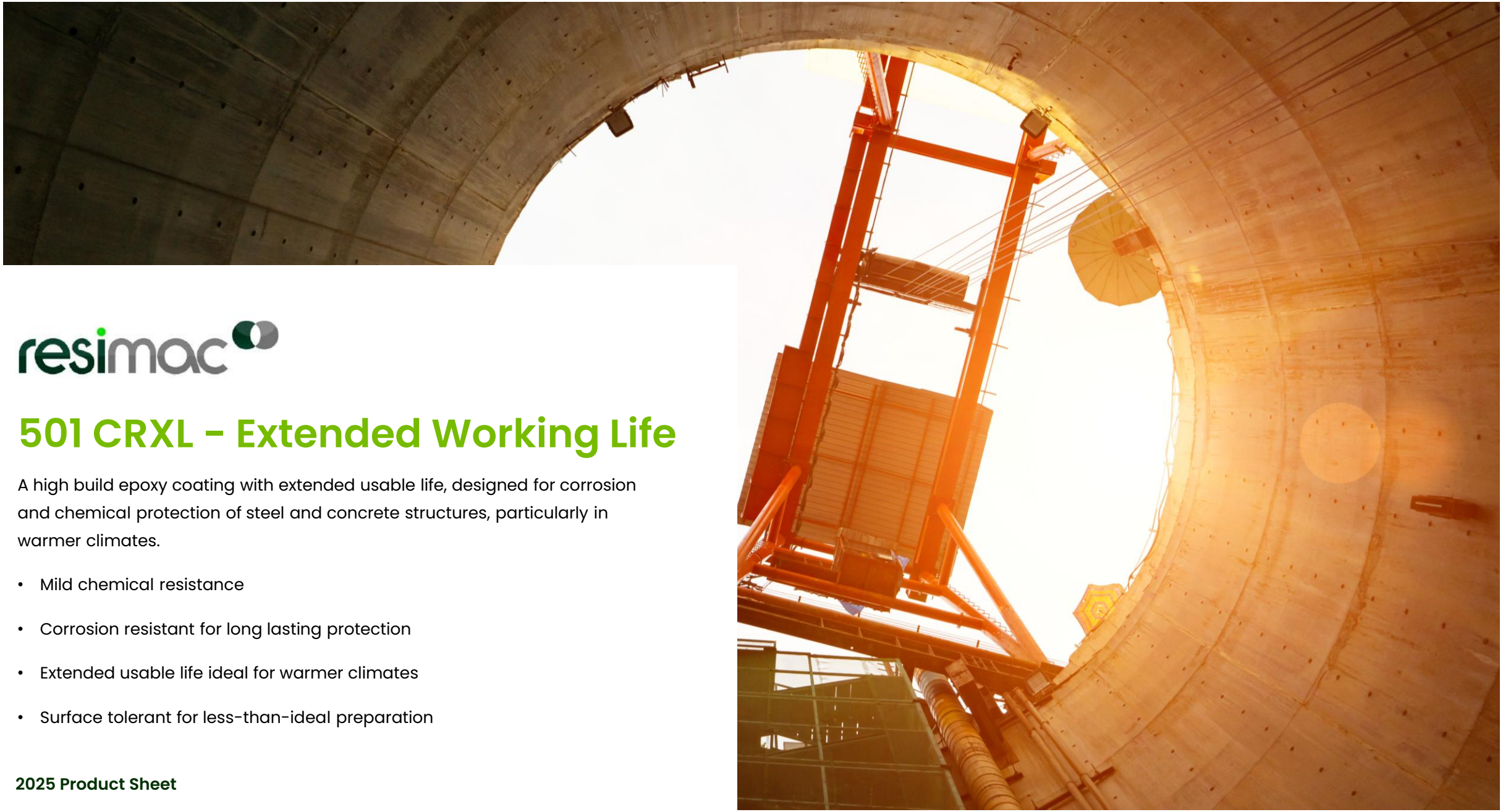

501 CRXL - Extended Working Life

A high build epoxy coating with extended usable life, designed for corrosion and chemical protection of steel and concrete structures, particularly in warmer climates.

- Mild chemical resistance
- Corrosion resistant for long lasting protection
- Extended usable life ideal for warmer climates
- Surface tolerant for less-than-ideal preparation

2025 Product Sheet

Typical Applications

501 CRXL is an extended usable life epoxy coating designed for corrosion and chemical protection of steel and concrete structures. Its high build formulation makes it ideal for standard airless spray applications, particularly in warmer climates.

- Pipelines
- Internal & external tank surfaces
- Structural steel
- Sumps
- Sheet and bearing piles
- Chemical intake areas
- Process equipment
- Chemical containment and bund areas

Characteristics

Appearance

Base	Highly structured thixotropic liquid
Activator	Amber liquid
Mixed	Thixotropic liquid

Solids Content

100%

Volume Capacity

658cc/kg

Sag Resistance

Nil at 400 microns

Density

Base	1.754
Activator	1.03
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		Water/Seawater Immersion		Chemical Immersion	
10°C/50°F	120 mins	10°C/50°F	20 hours	10°C/50°F	72 hours	10°C/50°F	6 days	10°C/50°F	14 days
20°C/68°F	60 mins	20°C/68°F	10 hours	20°C/68°F	36 hours	20°C/68°F	3 days	20°C/68°F	7 days
30°C/86°F	30 mins	30°C/86°F	5 hours	30°C/86°F	18 hours	30°C/86°F	36 hours	30°C/86°F	3.5 days
40°C/104°F	15 mins	40°C/104°F	2.5 hours	40°C/104°F	9 hours	40°C/104°F	18 hours	40°C/104°F	42 hours

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

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile:
194 kg/cm² (2750 psi)

Cathodic Disbandment

Tested to ISO 21809-3:2016
28 days - 1.5v - 3% NaCl

23°C (73°F)	2.3mm
65°C (149°F)	5.1mm
95°C (203°F)	7.7mm

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 200°C (392°F) dependant on load

Hardness

Shore D to ASTM D2240: 80

Flexural Strength

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

Corrosion Resistance

Tested to ASTM B117
Minimum 5000 hours

Compressive Strength

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

Details & Legal

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.

Quality

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

Pack Sizes

This product is available in the following pack sizes:
3.6ltrs (0.9 US gallon)
17ltrs (4.5 US gallon)

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)
De-ionised Water	30°C (86°F)
Diesel	40°C (104°F)
Hydrochloric Acid 20%	40°C (104°F)
Naphtha	40°C (104°F)
Phosphoric Acid 30%	40°C (104°F)
Sodium Hydroxide 50%	40°C (104°F)
Sulphuric acid 20%	40°C (104°F)

Coverage

The mixed product will give the following coverage rates:
3.6ltrs (0.9 US gallon)
14.4m² at 250microns 155ft² at 10mil
17ltrs (4.5 US gallon)
68m² at 250microns 730ft² at 10mil

Application Guide

A. Surface Preparation

Metallic Substrates: Abrasive blast cleaning

1. All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
2. All surfaces must be abrasive blasted to ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2) minimum blast profile of 75 microns (3mil) using an angular abrasive.
3. Once blast cleaned, the surface must be degreased and cleaned using MEK or similar type material.
4. All surfaces must be coated before gingering or oxidation occurs.

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.

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.

Existing Concrete Preparation:

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 and prime with 503 SPEP (low viscosity epoxy primer).
4. Apply 503 SPEP at 150 microns (6mil) WFT, leave to cure for 3 hours (20°C/68°F) before overcoating.

New Concrete Preparation:

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 and prime with 503 SPEP (low viscosity epoxy primer).
5. Apply 503 SPEP at 150 microns (6mil) WFT, leave to cure for 3 hours (20°C/68°F) before overcoating.

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 unit in full (3.6ltrs/17ltrs):

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 60 minutes at 20°C (68°F).

D. Application

Brush and roller application:

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 250 microns (10mil) 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, approximately10 hours at 20°C (68°F), apply a 2nd coat of material to all surfaces at 250 microns (10mil) wet film thickness.

Standard airless spray application:

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 line.
2. The temperature around the spray lines should be kept around 25-35°C (77-95°F).
3. Spray pressure of 3600psi and a tip size of 19-23 thou should be used.
4. Use as short a line as possible to maintain product temperature (maximum 8m/26”).
5. Circulate the product for a short time to achieve a consistent temperature.
6. Using a 50mm (2”) wide synthetic brush, stripe coat all edges, joints, corners and equipment with the mixed material.
7. The stripe coat must be approximately 100mm (4”) wide, at 250 microns (10mil) wet film thickness.
8. Apply the 1st coat of mixed product to all surfaces at 250 microns (10mil) wet film thickness.
9. Once the 1st coat of material has cured sufficiently, approximately 10 hours at 20°C (68°F), apply a 2nd coat of material to all surfaces at 250 microns (10mil) wet film thickness.

Quick Application Guide

Brush and roller application:

Step 1

Ensure you have:
1 x base unit
1 x activator unit
1 x spatula
1 x slow speed drill and 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 material is scraped down from the edges of the container using a spatula. Continue mixing until streak free.

Step 4

Apply to the correctly prepared substrate using a brush or medium pile roller to the required wet film thickness of 250 microns.

Step 5

Allow to cure for minimum of 10 hours (20°C/68°F)
or until touch dry and then apply the 2nd coat.

Quick Application Guide

Standard airless spray application:

Step 1

Ensure you have:
1 x base unit
1 x activator unit
1 x spatula
1 x slow speed drill and 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 material is scraped down from the edges of the container using a spatula. Continue mixing until streak free.

Step 4

Apply to the correctly prepared substrate at 250 microns using airless spray unit, minimum pump size 60:1. Heated & insulated lines are necessary to maintain a constant 20-25°C (68-75°F) temperature. Spray pressure 3600psi, tip size 19-23 Thou.

Step 5

Allow to cure for minimum of 10 hours (20°C/68°F) or until touch dry and then apply the 2nd coat as 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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