

RESICHEM 501 CRSG

Resichem 501 CRSG is a high build solvent-free epoxy coating designed for the long term protection of steel and concrete structures against corrosion and chemical attack.

The coating can be applied to mechanical or abrasive blast clean surfaces and will cure at temperatures as low as 5°C.

Typical applications

Pipelines, internal & external tank surfaces, chemical containment and bund areas, sheet and bearing piles, structural steel, chemical intake areas, process equipment.

Characteristics

Appearance

Base:	Highly structured thixotropic liquid
Activator:	Amber liquid
Mixed:	Thixotropic liquid

Mixing Ratio

By weight:	4:1
By volume:	2.4:1

Density

Base:	1.78
Activator:	1.05
Mixed:	1.56

Solids content

100%

Sag Resistance

Nil at 400 microns

Coverage

Brush or roller applications:

The material should be applied in two coats at a target thickness of 250 microns per coat.

At 250 microns Resichem 501 CRSG will have a theoretical coverage rate of 4m² per ltr per coat.

Cure Times

The applied material should be allowed to harden for the times indicated below before being subjected to the conditions indicated:

Usable life

10°C	60 minutes
20°C	30 minutes
30°C	15 minutes
40°C	7.5 minutes

Minimum overcoating time

10°C	8 hours
20°C	4 hours
30°C	2 hours
40°C	1 hour

Maximum overcoating time

10°C	72 hours
20°C	36 hours
30°C	18 hours
40°C	9 hours

Water/ sea water immersion

10°C	6 days
20°C	3 days
30°C	36 hours
40°C	18 hours

Chemical immersion

10°C	10 days
20°C	5 days
30°C	2.5 days
40°C	30 hours

Storage life

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

Mechanical Properties

Abrasion Resistance

Taber CS17 Wheels/1 Kg 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)

Impact Resistance

Tested to ASTM G14
2.0 joules

Cathodic Disbondment

Tested to ISO 21809-3:2016
28 days, 1.5v, 3% NaCl
23°C 2.3mm
65°C 5.1mm
95°C 7.7mm

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

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 60°C. Resistant to dry heat up to 200°C dependant on load.

Chemical Resistance

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

<i>Typical Chemicals</i>	<i>Maximum Temperature</i>
<i>Brine</i>	40°C
<i>Crude Oil</i>	40°C
<i>De-ionised Water</i>	30°C
<i>Diesel</i>	40°C
<i>Hydrochloric Acid 20%</i>	40°C
<i>Naphtha</i>	40°C
<i>Phosphoric Acid 30%</i>	40°C
<i>Sodium Hydroxide 50%</i>	40°C
<i>Sulphuric acid 20%</i>	40°C

For more detailed information refer to the Resimac Technical Centre for advice.

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 the Technical Data Sheet for the material.

Health and 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 the detailed Material Safety Data Sheet

Legal Notice: The data contained within this Product Specification is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. Resimac accepts no liability arising out of the use of this information or the product described herein.