

RESICHEM 501 ARXL

Resichem 501 ARXL is a high build solvent-free abrasion resistant epoxy coating containing hardened ceramic particles to give superior abrasion resistance to steel and concrete structures.

Typical applications

Internal pipe surfaces, Tank internal surfaces, Chutes, Hoppers, Sumps, Process vessels, Separators, Chemical pits, Fans & fan housings, Turbine blades, Turbine housings

Characteristics

Appearance

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

Mixing Ratio

By weight: 3.5:1
By volume: 2:1

Density

Base: 1.72
Activator: 1.03
Mixed: 1.49

Solids content

100%

Sag Resistance

Nil at 400 microns

Coverage

Resichem 501 ARXL must be applied as a 2 coat system to properly prepared surfaces.

Brush, roller or spray applications:

At 400 microns Resichem 501 ARXL will have a theoretical coverage rate of 2.5m² 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 120 minutes
20°C 60 minutes
30°C 30 minutes
40°C 15 minutes

Minimum overcoating time

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

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 14 days
20°C 7 days
30°C 3.5 days
40°C 42 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
0.09cc loss/1000 cycles

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile
190 kg/ cm² (2700 psi)

Compressive strength

Tested to ASTM D695
680kg/cm² (9650psi)

Corrosion Resistance

Tested to ASTM B117
Minimum 5000 hours

Flexural Strength

Tested to ASTM D790
518kg/cm² (7350psi)

Hardness

Shore D to ASTM D2240
80

Immersion Testing

Tested to ISO 2182-2
50°C
No blistering or corrosion after 6 months

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 60°C.
Resistant to dry heat up to 200°C dependent 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>Black Liquor</i>	40°C
<i>Crude Oil</i>	30°C
<i>Diesel</i>	40°C
<i>Hydrochloric Acid 20%</i>	40°C
<i>Hydrocarbons</i>	40°C
<i>Phosphoric Acid 30%</i>	40°C
<i>Sea Water</i>	40°C
<i>Sodium Hydroxide 50%</i>	40°C
<i>Sulphuric acid 20%</i>	40°C
<i>White Liquor</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.