# **Product Specification**

# resimac Ltd.

# RESICHEM 507 DWPU

**Resichem 507 DWPU** is a high build solvent-free polyurethane coating designed for the long term protection of steel and concrete structures against corrosion and chemical attack. The coating has been approved under the UK WRAS scheme BS6920-1:2014 for contact and immersion conditions in drinking water.

# **Typical applications**

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

### Characteristics

#### Appearance

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

#### Mixing Ratio

By weight:	3.25:1
By volume:	3:1

#### Density

Base:	1.31
Activator:	1.22
Mixed:	1.29

# Solids content

#### Sag Resistance

Nil at 400 microns

#### Coverage

Resichem 507 DWPU must be applied as a 2 coat system to properly prepared surfaces.

At 350 microns Resichem 507 DWPU will have a theoretical coverage rate of 2.85m<sup>2</sup> 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	40 minutes
20°C	20 minutes
30°C	10 minutes
40°C	5 minutes

#### Minimum overcoating time

10°C	12 hours
20°C	6 hours
30°C	3 hours
40°C	90 minutes

#### Maximum overcoating time

10°C	48 hours
20°C	24 hours
30°C	12 hours
40°C	6 hours

#### Water/ sea water immersion

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

#### **Chemical immersion**

10 days
5 days
2.5 days
30 hours

#### Storage life

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

### Mechanical Properties Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile 169 kg/ cm<sup>2</sup> (2400 psi)

#### Impact Resistance

Tested to ASTM G14 8.6 joules

#### Compressive strength

Tested to ASTM D 695 552kg/cm<sup>2</sup> (7830psi)

#### **Corrosion Resistance**

Tested to ASTM B117 Minimum 5000 hours

#### **Flexural Strength**

Tested to ASTM D790 755kg/cm<sup>2</sup> (10700psi)

#### Hardness

Shore D to ASTM D2240 80

#### Heat Resistance

Suitable for use in immersed conditions at temperatures up to 70°C. Resistant to dry heat up to 120°C dependent on load.



## **Chemical Resistance**

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

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Typical Chemicals	Maximum Temperature
Chlorine (Wet)	30°C
Chloramine	35°C
Chlorine Dioxide (Wet)	35°C
Sodium Hypochlorite 15%	30°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 We cannot issue. 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.