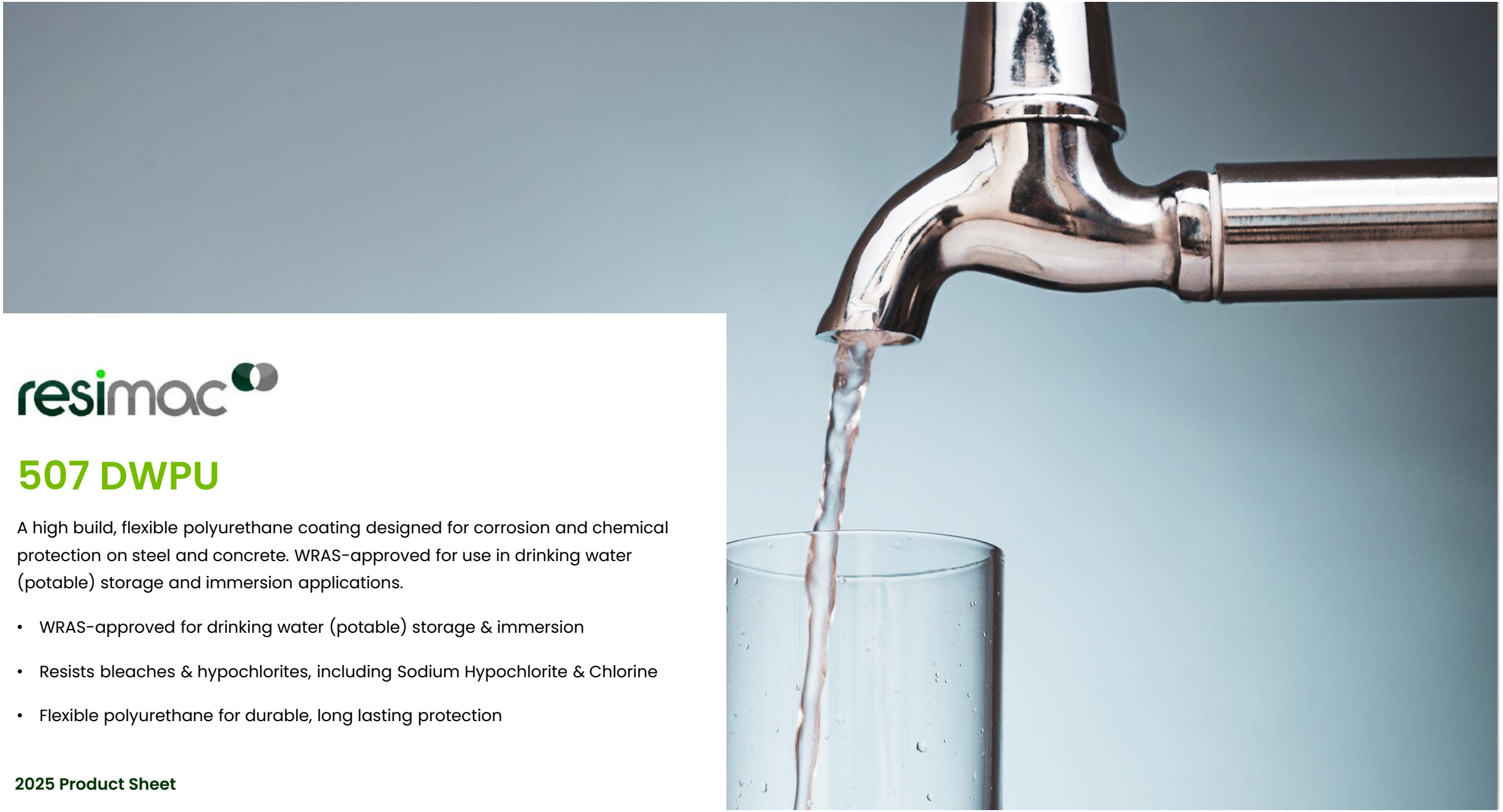

resimac

507 DWPU

A high build, flexible polyurethane coating designed for corrosion and chemical protection on steel and concrete. WRAS-approved for use in drinking water (potable) storage and immersion applications.

- WRAS-approved for drinking water (potable) storage & immersion
- Resists bleaches & hypochlorites, including Sodium Hypochlorite & Chlorine
- Flexible polyurethane for durable, long lasting protection

2025 Product Sheet

Typical Applications

507 DWPU is an advance polyurethane coating designed to protect steel and concrete structures from corrosion and chemical attack. Its WRAS-approved formulation meets BS6920-1:2014 standards, making it suitable for drinking water (potable) storage and immersion applications. This solvent free coating ensures safe application while providing durability in demanding environments.

- Internal & external tank surfaces
- Structural steel
- Chemical intake areas
- Process equipment
- Sumps
- Chemical containment & bund areas

Characteristics

Appearance

Base	Highly structured thixotropic liquid
Activator	Amber liquid
Mixed	Thixotropic liquid

Solids Content

100%

Volume Capacity

775cc/kg

Sag Resistance

Nil at 400 microns

Density

Base	1.31
Activator	1.22
Mixed	1.29

Mixing Ratio

By weight	3.25:1
By volume	3:1

Storage Life

2 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	40 mins	10°C/50°F	12 hours	10°C/50°F	48 hours	10°C/50°F	6 days	10°C/50°F	10 days
20°C/68°F	20 mins	20°C/68°F	6 hours	20°C/68°F	24 hours	20°C/68°F	3 days	20°C/68°F	5 days
30°C/86°F	10 mins	30°C/86°F	3 hours	30°C/86°F	12 hours	30°C/86°F	36 hours	30°C/86°F	2.5 days
40°C/104°F	5 mins	40°C/104°F	90 mins	40°C/104°F	6 hours	40°C/104°F	18 hours	40°C/104°F	30 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

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile:
169kg/cm² (2400 psi)

Impact Resistance

Tested to ASTM G14 8.6 joules

Corrosion Resistance

Tested to ASTM B117
Minimum 5000 hours

Compressive Strength

Tested to ASTM D 695
552kg/cm² (7830psi)

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 70°C (158°F)
Resistant to dry heat up to 120°C (248°F) dependent on load

Hardness

Shore D to ASTM D2240: 78

Flexural Strength

Tested to ASTM D790
755kg/cm² (10700psi)

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.

Food Contact

USDA compliant for incidental food contact.

Title 21, Food and Drugs, Chapter I, U.S. Code of Federal Regulations, FDA, Subchapter B – Food for Human Consumption, Section 175.300 (Resinous and Polymeric Coatings).

Pack Sizes

This product is available in the following pack sizes:
1ltre (0.26 US gallon)
2ltrs (0.53 US gallon)

Chemical Resistance

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

Chlorine (wet)	40°C (104°F)
Chloramine	40°C (104°F)
Chorine Dioxide (wet)	30°C (86°F)
Sodium Hypochlorite 15%	40°C (104°F)

Quality

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

Coverage

The mixed product will give the following coverage rates:
1ltr (0.26 US gallon)

3m² per litre	32.3ft²

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.

Metallic Substrates: Mechanical abrasion

1. All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
2. All surfaces must be mechanically abraded using handheld grinders to ISO 8501/4 ST3 (SSPC SP3 ST3).
3. Once abraded, the surface must be degreased and cleaned using MEK or similar type material.
4. All surfaces must be coated before gingering or oxidation occurs.

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.

Metallic Substrates: GRP/ Fibreglass substrates:

1. All surface contaminants must be removed from the surface using an appropriate cleaner such as MEK.
2. All surfaces must be mechanically abraded using handheld grinder or mechanical sanders.
3. Once abraded, the surface must be degreased and cleaned using MEK or similar type material.

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.

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 5°C (41°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 (1ltr/2ltrs):

1. Transfer the contents of the Activator unit into the Base container.
2. Using an electric paddle mixer or spatula. 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 20 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 350 microns (14mil) 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 350 microns (14 mil) wet film thickness.
5. Once the 1st coat of material has cured sufficiently, approximately 6 hours at 20°C (68°F), apply a 2nd coat of material to all surfaces at 350 microns (14 mil) wet film thickness.

Quick Application Guide

Step 1

Ensure you have:
1 x base unit
1 x activator unit
1 x spatula
1 x brush
(or) 1 x medium pile roller
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 base component is scraped down from the edges of the container using a spatula.

Step 4

Before applying the material check you have a streak free mix and a uniform material.

Step 5

Apply the coating using a brush or roller at 350 microns WFT per coat. Apply 2 x coats minimum.

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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