

RESICHEM 507 DWPU

Resichem 507 DWPU is a high build solvent-free urethane anti-corrosive coating designed for the efficient long term protection of pumps, valves, pipe fittings and equipment. Resichem DWPU also meets the requirements of BS6920:1990 as required by the Water Research Centre.

Typical applications

Pumps, valves, pipe work, pipe fittings, steel and concrete structures.

Characteristics

Appearance

Base: Various coloured thixotropic liquid
 Activator: Amber liquid
 Mixed: Various coloured 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

100%

Sag Resistance

Nil at 1500 microns SPRAY GRADE
 Nil at 750 microns BRUSH GRADE
 Mean Test Data 1370 - 1690 microns

Useable Life

10°C 25-35 minutes
 20°C 15-20 minutes
 30°C 8-10 minutes

Coverage

The material should be applied by target thickness of -
 1000 - 1500microns

SPRAY GRADE

500-750 microns BRUSH GRADE

Cure Times

At 20°C the applied materials should be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures and reduced at higher temperatures:

Movement without load or immersion 2 hours

Light loading 8 hours

Full loading or water immersion 3 days

Chemical Contact 14 days

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/ cm² (2400 psi)

Cathodic Disbondment

(British Gas CW6 and FW0028 Draft)

Pass

Corrosion Resistance

Tested to ASTM B117
 Minimum 5000 hours

Flexibility

(British Gas FW0028 Draft method)

3% Strain at 20°C - PASS

3% Strain at 5°C - PASS

3% Strain at 0°C - PASS

(ASTM D522)

Pass

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 down to - 20°C and up to 120°C dependant on load.

Water Resistance

(British Gas CW6 and FW0028 Draft methods)

Pass at 50°C

Impact Resistance

(British Gas CW6)

15 Joules

(BS EN 10290)

23°C 8.6 Joules

5°C 6.1 Joules

Adhesion - Resistance to Removal

(BS EN 10290)

23°C rating 1

60°C rating 2

Adhesion - Pull Off Test

(BS EN 10290)

23°C 175kg/ cm²

60°C 73kg/ cm²

(ASTM D4541)

214kg/ cm²

Adhesion - Immersion in

Tap Water

(BS EN 10290)

Rating 3

Electrical Insulation

Resistance

(BS EN 10290)

8.4 X 10⁹

Indentation Resistance

(BS EN 10290)

23°C 0.1mm

60°C approx. 15%

Flexibility

(BS EN 10290)

Pass

Elongation

(BS EN 10290)

14.5%

Abrasion Resistance

(ASTM D4060)

90mgm weight loss per
1000 cycles - 1kg load -
CS17 wheel

Chemical

Resistance

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

Immersion Conditions at 20°C

Acetic Acid	10%
Benzoic Acid	15%
Castor Oil	
Cyclohexane	
Ethyl Alcohol	50%
Formic Acid	10%
Fuel Oil	
Glycerine	
Hydrochloric Acid	20%
Isopropanol	
Lactic Acid	20%
Mineral Oil	
Nitric Acid	10%
Phosphoric Acid	50%
Potassium Hydroxide	10%
Sodium Carbonate	10%
Sodium Hydroxide	10%
Sulphuric Acid	50%
White Spirit	

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.