



## 209 EIP PU

A durable, flexible polyurethane coating designed for surfaces exposed to extreme impact, wear, and abrasion. Provides long lasting protection for concrete and metallic structures.

- Flexible polyurethane coating designed to absorb impact forces
- Withstands wear from slurries and aggregates for long term protection
- Resistant to cavitation and high flow erosion

2025 Product Sheet

# Typical Applications

209 EIP PU is a high build, solvent free polyurethane coating engineered for extreme impact protection in high wear environments. Formulated to withstand cavitation damage, abrasion, and impact from slurries and aggregates, it provides a tough yet flexible finish that extends the service life of industrial equipment.

- Chutes
  - Hoppers
  - Pumps
- Valves
  - Pipe work

# Cure times

Usable Life		Min overcoating time		Max overcoating time		Full Cure	
10°C/50°F	40 mins	10°C/50°F	12 hours	10°C/50°F	272 hours	10°C/50°F	14 days
20°C/68°F	20 mins	20°C/68°F	8 hours	20°C/68°F	36 hours	20°C/68°F	7 days
30°C/86°F	10 mins	30°C/86°F	3 hours	30°C/86°F	18 hours	30°C/86°F	3.5 days
40°C/104°F	5 mins	40°C/104°F	1.5 hours	40°C/104°F	9 hours	40°C/104°F	1.75 hours

# Characteristics

Appearance		Density	
Base	Light Grey or Blue	Base	1.31
Activator	Amber Liquid	Activator	1.22
Mixed	Light Grey or Blue	Mixed	1.29
Solids Content		Mixing Ratio	
100%		By weight	3.25:1
		By volume	3:1
Volume Capacity		Storage Life	
775cc/kg		2 years if unopened and stored in normal dry conditions, 15–30°C (59–86°F)	
Sag Resistance			
Nil at 400 microns			

# Coverage

2ltr (0.5 US gallon) of fully mixed product will give the following coverage rates:

2.5m² at 400 microns      26.88ft² at 16mil

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

### Corrosion Resistance

Tested to ASTM B117  
Minimum 5000 hours

### Flexural Strength

Tested to ASTM D790  
614kg/cm<sup>2</sup> (8710psi)

### Hardness

Shore D to ASTM D2240  
20°C (68°F) 80

### Elongation

Tested to BS EN 10290 14.5%

### Adhesion

Tensile Shear to ASTM D1002 on  
abrasive blasted dry mild steel with  
75 micron profile 200kg/cm<sup>2</sup>  
(2850psi)

### Adhesion: Pull off test

Tested to BS EN 10290 on abrasive  
blasted dry mild steel with 75 micron  
profile 175kg/cm<sup>2</sup> (2480psi)

### Impact Resistance

Tested to ASTM D256 32J/m

## Details & Legal

### Chemical Resistance

The product resists attack by a  
wide variety of inorganic acids,  
alkalis, salts and organic media. For  
more detailed information refer to  
the Resimac Technical Centre for  
advice.

### 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.

### Quality

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

### 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:  
2ltrs (0.5 US gallons)

# Application Guide

## A. Surface Preparation

### Metallic Substrates:

- 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.

### Existing Concrete:

- 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.

### 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.

#### **New Concrete:**

- 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 10°C (50°F).
- 3** The ambient & surface temperatures are not less than 3°C (6°F) above the dew point.

## **C. Mixing**

#### **Mix the complete unit material (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 or 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. The stripe coat must be approximately 100mm (4") wide, at 300 microns (12mil) wet film thickness.
- 3 Once the stripe coat has cured sufficiently and is capable of being overcoated, apply the 1st coat of mixed product to all surfaces at 300-400 microns (12-16mil) wet film thickness.
- 4 Once the 1st coat of material has cured sufficiently, approximately 6-8 hours at 20°C (68°F), apply a 2nd coat of material to all surfaces at 300-400 microns (12-16mil) wet film thickness.
- 5 Once the 2nd coat of material has cured sufficiently, approximately 6-8 hours at 20°C (68°F), apply a 3rd coat of material to all surfaces at 300-400 microns (12-16mil) wet film thickness.

*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.*

## Quick Application Guide



### Step 1

Ensure you have:

1 x base unit

1 x activator unit

1 x spatula

1 x 1-2" synthetic brush



### Step 2

Open the activator tin and pour contents into the base unit and start to mix the 2 components together using a spatula.



### Step 3

Pay attention to the base and sides of the container while mixing. Once completed you must have a consistent light grey mix.



### Step 4

Once you have finished mixing the 2 components together check you have a streak free consistency.



### Step 5

Using a brush apply the mixed product to the prepared surface at 300-400 microns wet film thickness. The coating must be applied as a 3 x coat system.

## 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

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.

## Information & Enquiries

For more information and technical data please visit our website or contact us.

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