



**resimac** Ltd. 

## 406 GP 85 Putty

A flexible, abrasion resistant urethane elastomer repair paste. Designed for lining and repairing rubber surfaces, it bonds effectively to Nitrile, Neoprene, and Natural rubber.

- Rapid return to service for minimal downtime
- Highly flexible to withstand movement and impact
- Bonds effectively to rubbers and plastics

**2025 Product Sheet**

## Typical Applications

406 GP 85 Putty is a two component, solvent free urethane elastomer formulated for repairing and lining rubber surfaces. Its durable, abrasion resistant composition ensures long lasting performance in demanding environments. Suitable for bonding to materials such as Nitrile, Neoprene, and Natural rubber, it provides a reliable solution for industrial repairs.

- Gasket sealing
- Lining of process equipment
- Repairing worn rubber components

## Cure times

### Usable Life

10°C/50°F	15 mins
20°C/68°F	9 mins
30°C/86°F	4 mins
40°C/104°F	2 mins

### Min overcoating time

10°C/50°F	60 mins
20°C/68°F	30 mins
30°C/86°F	20 mins
40°C/104°F	15 mins

### Max overcoating time

10°C/50°F	72 hours
20°C/68°F	36 hours
30°C/86°F	18 hours
40°C/104°F	9 hours

### Light loading Dry

10°C/50°F	16 hours
20°C/68°F	8 hours
30°C/86°F	6 hours
40°C/104°F	4 hours

### Heavy Loading Dry

10°C/50°F	48 hours
20°C/68°F	24 hours
30°C/86°F	20 hours
40°C/104°F	10 hours

### Water / Sea immersion

10°C/50°F	6 days
20°C/68°F	3 days
30°C/86°F	36 hours
40°C/104°F	18 hours

### Chemical immersion

10°C/50°F	14 days
20°C/68°F	7 days
30°C/86°F	3 days
40°C/104°F	36 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.*

## Characteristics

### Appearance

Base	Black Paste
Activator	Amber Paste
Mixed	Black Paste

### Solids Content

100%

### Density

Base	1.05
Activator	1.15
Mixed	1.08

### Mixing Ratio

By weight	100:26
By volume	100:23

### Storage Life

1 year if unopened and stored in normal dry conditions, 15–30°C (59–86°F)

### Slump Resistance

Nil at 2.5cm

## Coverage

500g will cover 0.46m<sup>2</sup> at a nominal thickness of 1mm not allowing for losses

## Mechanical Properties

### Tensile Strength

Tested to BS EN ISO 37 100 kg/cm<sup>2</sup>  
(1450psi)

### Elongation

Tested to BS EN ISO 37 900%

### Tear Strength

Tested to BS EN ISO 34 4690kg/m  
(262pli)

### Hardness

Tested to ASTM D2240 Shore A: 85

### 90°C (194°F) Peel Adhesion to Steel

Tested to ASTM D429

*Abrasive blasted and primed with  
402 primer*

3132 kg/m (175pli)

### Los Angeles Abrasion Test (modified)

After 7 days cure at 20°C (248°F)  
using granite and 150# silicon  
carbide. Volume loss per week  
0.92%

### 180°C (176°F) Peel Adhesion to

#### Rubbers

Tested to ASTM D413

Roughened with MBX and primed  
with 402 primer:

Neoprene 609 kg/m (TF) 34 pli

Nitrile 377 kg/m (CS) 21 pli

Natural 215 kg/m (CS) 12 pli

EPDM 428 kg/m (CS) 24 pli

*TF = Tape failure*

*CS = Cohesive failure in substrate*

### Heat Resistance

Suitable for long term water

immersion at temperatures up to  
50°C (122°F)

intermittent contact water contact  
up to 80°C (176°F)

Resistant to dry heat up to  
120°C (248°F)

### Linear Shrinkage

500x 50x 10mm <0.05%

## Details & Legal

### Chemical Resistance

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

Refer to the Resimac Technical  
Centre for advice.

### Pack Sizes

This product is available in the  
following pack sizes:  
500gm (1.1lbs) foil laminate bag

### 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 this document.

# Application Guide

## A. Surface Preparation

### 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 Prime the surface with 402 Multi-surface primer.

### 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.
- 5 Prime the surface with 402 Multi-surface primer.

### 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.

### Rubber substrates:

- 1 Remove any surface contamination and degrease with MEK.
- 2 Use a suitable carding tool or MBX bristle blaster to roughen the surface before brushing away any debris.
- 3 Prime the surface with 402 Multi-surface primer.

## B. Product Preparation

### Prior to mixing, please ensure the following:

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

*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.*

## C. Mixing & Application

- 1 406 GP 85 Putty is supplied in a twin compartment bag with the base and activator components already pre-measured.
- 2 Remove the bag from the outer foil container and warm to around 20°C (68°F) prior to use to ease mixing.
- 3 Remove the plastic divider and thoroughly mix the two components by hand until homogeneous.
- 4 Dispense the mixed product onto the prepared surface and smooth out using the applicator tool provided.

*If required, 406 GP 85 Putty can be used in conjunction with 808 reinforcement tape to create a multi-layered reinforcement system.*

Once all surfaces, metallic or rubber, have been prepared, apply 402 Multi-surface Primer to all surfaces using a cut down brush. Apply the primer to the surface with a stippling action avoiding ponding and leave to cure until touch dry and for a minimum of 20 minutes at 20°C (68°F).

## Quick Application Guide



### Step 1

Ensure you have:  
1 x 500gm sachet  
1 x 402 Primer  
1 x spatula  
1 x applicator tool  
1 x reinforcement tape  
1 x paintbrush



### Step 2

Remove dividing rod from the sachet.



### Step 3

By hand forcibly mix the 2 components together without piercing the sachet for approx. 3-4 mins.



### Step 4

Cut the end of the sachet and dispense material onto a clean mixing board.



### Step 5

Check to ensure that the 2 components are fully combined by giving a final mix with the spatula. The paste should be a consistent, uniform black colour.



### Step 6

Using the applicator tool apply the mixed material to the primed repair surface.

## 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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