**Technical Data Sheet** 



# **RESICHEM 506 ALUPRIME –** corrosion resistant coating

Resichem 506 Aluprime is a solvent based epoxy coating designed for the long term protection of steel and concrete structures against corrosion.

- Apply to mechanical, hydro-blasted or abrasive blast cleaned surfaces
- Cures at temperatures as low as 5°C (41°F)
- Apply to metallic surfaces suffering from condensation/ damp
- Ideal for protection against corrosion and weathering

# **Typical applications**

Cold water lines Pipework Structural Steel Sheet/ bearing piles

External tank surfaces Process equipment

# **Surface Preparation**

## Metallic Substrates – Mechanical abrasion

- All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
   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.

#### Metallic Substrates – Hydro-blasting

- All surfaces must be hydro-blasted using clean water at 12,000 psi (850bar) to NACE 5 (SSPC SP13 WJ3-WJ1).
   All surfaces must be coated before gingering or oxidation occurs

#### 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.

**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**

- If the concrete surface is contaminated, pressure wash using clean water.
   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.

### Mixing

Prior to mixing, please ensure the following:

- 1. The base component is at a temperature between 15-25°C (60-77F°).
- 2. The ambient & surface temperature is above 5°C (41F°).
- Once these 2 checks have been met, please proceed with mixing the product.

  - Transfer the contents of the Activator unit into the Base container.
     Using an electric paddle mixer, 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 2 hours at 20°C (68°F).

# Application

Brush or roller applications

- Pour the mixed material into a paint kettle or paint tray (this will maximise the usable life)
   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 150 microns (6mil) wet film thickness.
- 3. Once the stripe coat has cured sufficiently and is capable of being overcoated, apply the 1<sup>st</sup> coat of mixed product to all surfaces at 150 microns (6mil) wet film thickness.
- 4. If required once the 1<sup>st</sup> coat of material has cured sufficiently, approximately 6 hours at 20°C (68F°), apply a 2<sup>nd</sup> coat of material to all surfaces at 150 microns (6 mil) wet film thickness

Resimac Ltd, Unit B, Park Barn Estate, Station Road, Topcliffe, Thirsk, YO7 3SE, United Kingdom Tel: +44 1845 577498 Email: info@resimac.co.uk Web: www.resimacsolutions.com



Airless spray applications

- 1. Using a paintbrush, stripe coat all edges, corners, and areas inaccessible to a spray application.
- 2. Material should be sprayed using an airless system capable of producing 2000-3000psi (135-200 Bar).
- 3. Spray using 13-21 thou sized tips (0.33-0.53mm).
- 4. Spray apply the coating at a nominal 150 micron (6 mil) wet film thickness.
- 5. Clean equipment with MEK or other similar solvent.

Conventional spray applications

1. For small applications, Aluprime 506 may be sprayed using conventional air spray equipment. Please contact the Resimac Technical department for detailed information.

#### **Coverage Rates**

 5ltrs (1.3 US gallon) of fully mixed product will give the following coverage rates –

 33m<sup>2</sup> at 150 microns
 355ft<sup>2</sup> at 6mil

 Please note that the coverage rates quoted are theoretical and do not take into consideration the profile or condition of the surface being repaired.

## **Cure Times**

At 20°C (68°F) 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:

Usable life Minimum overcoating time Maximum overcoating time 2 hours 6 hours 36 hours (72 hours when overcoated with itself or 508 UVPU)

# Pack Sizes

This product is available in the following pack sizes – 5ltrs (1.3 US Gallon)

# Colour

Base component – Dark Grey Activator component – Amber

# **Over-coating times**

Minimum - the material can be over-coated as soon as it is touch dry, approximately 6 hours at 20°C (68°F). Maximum - the over-coating time should not exceed 36 hours, unless being overcoated with itself or Resichem 508 UVPU, in which case the maximum overcoating time becomes 72 hours.

Where the maximum over-coating time is exceeded, the material should be allowed to harden before being abraded or flash blasted to remove surface contamination.

# Storage Life

5 years if unopened and store in normal dry conditions (15-30°C/ 60-86F°)

# **Other Technical Documents**

Quick Application Guide-Brush or roller applicationsSafety Data Sheets-Base & Activator componentsProduct Specification Sheet-Technical Performance Information

# Health and Safety

Please ensure good practice is observed at all times. Protective gloves, goggles & a disposable coverall must be worn during the mixing and application of this product. Before mixing and applying the material ensure you have read the fully detailed Safety Data Sheet.

# Legal Notice:

The data contained within this Technical Data Sheet 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 if the product is suitable for use. Resimac accepts no liability arising out of the use of this information or the product described herein.

Resimac Ltd, Unit B, Park Barn Estate, Station Road, Topcliffe, Thirsk, YO7 3SE, United Kingdom Tel: +44 1845 577498 Email: info@resimac.co.uk Web: www.resimacsolutions.com