Technical Data Sheet

RESICHEM 501 ARXL – abrasion resistant coating

Resichem 501 ARXL is a high build solvent-free abrasion resistant epoxy coating designed to protect metallic and concrete structures and equipment from chemical attack, wear & abrasion.

- Contains hardened ceramic particles
- High abrasion and impact resistance
- Ideal for protection against high solid content chemicals/ fluids

Typical applications

Internal pipe surfaces	Tank internals	Chutes	Hoppers
Sumps	Process vessels	Separators	Chemical pits
Fans & fan housings	Turbine blades	Turbine housings	

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.

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

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 Resichem 503 SPEP (low viscosity epoxy primer).
4. Apply 503 SPEP at 6mil WFT, leave to cure for 3 hours (68°F) before overcoating.

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 Resichem 503 SPEP (low viscosity epoxy primer).
5. Apply 503 SPEP at 6mil WFT, leave to cure for 3 hours (68°F) before overcoating.

Mixing

Prior to mixing, please ensure the following:

1. The base component is at a temperature between 60-77°F.
2. The ambient & surface temperature is above 50°F.
3. The ambient & surface temperatures are not less than 6°F above the dew point.

Once these 3 checks have been met, please proceed with mixing the product.

1. Transfer the contents of the Activator unit into the Base container.
2. 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 60 minutes at 68°F.

Application

Brush or roller applications

1. Pour the mixed material into a paint kettle or paint tray (this will maximise the usable life)
2. Using a 2” wide synthetic brush, stripe coat all edges, joints, corners and equipment with the mixed material. The stripe coat must be approximately 4” wide, at 16mil 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 16mil wet film thickness.
4. Once the 1st coat of material has cured sufficiently, approximately 10 hours at 68°F, apply a 2nd coat of material to all surfaces at 16mil wet film thickness

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Application (continued)

Spray Applications

1. Spray application should be carried out by airless spray using a 60:1 ratio pump with an attached hot water pump to heat the spray lines.
2. The temperature around the spray lines should be kept around 77-95°F.
3. Spray pressure of 3500psi and a tip size of 19-23 thou should be used.
4. Use as short a line as possible to maintain product temperature (maximum 26ft)
5. Circulate the product for a short time to achieve temperature equilibrium.
6. Apply the 1st coat of mixed product to all surfaces at 16mil wet film thickness.
7. Once the 1st coat of material has cured sufficiently, approximately 10 hours at 68°F, apply a 2nd coat of material to all surfaces at 16mil wet film thickness

Coverage Rates

3.6ltrs (0.9 US gallon) of fully mixed product will give the following coverage rates –
96ft² at 16mil
17ltrs (4.5 US gallon) of fully mixed product will give the following coverage rates –
457ft² 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.

Cure Times

At 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	60 minutes
Minimum overcoating time	10 hours
Maximum overcoating time	36 hours
Water/ sea water immersion	3 days
Chemical immersion	7 days

Pack Sizes

This product is available in the following pack sizes –
3.6ltrs (0.9 US Gallon), 17ltrs (4.5 US Gallons).

Color

Base component – Light Grey or Black
Activator component – Amber

Over-coating times

Minimum - the material can be over-coated as soon as it is touch dry, approximately 10 hours at 68°F.
Maximum - the over-coating time should not exceed 36 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 (60-86°F)

Other Technical Documents

Quick Application Guide	-	Brush or roller applications
Quick Application Guide	-	Spray application
Safety Data Sheets	-	Base & Activator components
Product Specification Sheet	-	Technical Performance Information

Health and Safety

Please ensure good practice is always observed. 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: