

RESICHEM 524 DTM WB – water based epoxy coating applied direct to metal

Resichem 524 DTM WB is a high performance water-based epoxy coating specifically developed as an anti-corrosion barrier to prepared metal surfaces. The unique formulation allows the coating to be applied directly to prepared metal and previously coated surfaces.

- Water based epoxy
- Fast curing
- Long term corrosion protection

Typical applications

524 DTM WB can be applied to a wide range of metallic substrates and can be used to protect -

Structural steel	Gantries	Roof purlins/ beams	Trackside equipment
Rail Bogeys	Vehicular chassis	Railings	

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.

Metallic Substrates – Hydro-blasting

1. All surfaces must be hydro-blasted using clean water at 12,000 psi (850bar) to **NACE 5 (SSPC SP13 WJ3-WJ1)**.

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 25 microns (1mil) using an angular abrasive.
3. Once blast cleaned, the surface must be degreased and cleaned using MEK or similar type material.

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.

For certain non-immersion applications it may be acceptable to apply Resichem 524 DTM WB to a manually prepared steel surfaces, for example non-sparking hand tooling when hot work is not permitted. Please contact the Resimac Technical department for guidance.

Mixing

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.

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 90 minutes at 20°C (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 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 75-100 microns (3-4mil) wet film thickness.
3. Once the stripe coat has cured sufficiently and is capable of being overcoated, apply the mixed product to all surfaces at 75-100 microns (3-4mil) wet film thickness.
4. Once the 1st coat has cured sufficiently, approximately 4 hours at 20°C (68°F), apply a 2nd coat of material at 75-100 microns (3-4mil) wet film thickness.

Coverage Rates

5ltrs (1.2 US gallon) of fully mixed product will give the following coverage rates –
50m² at 100 microns 536ft² at 4mil

20ltrs (5.3 US gallon) of fully mixed product will give the following coverage rates –
200m² at 100 microns 2146ft² at 4mil

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	50 minutes
Touch dry	2 hours
Minimum overcoating time	4 hours
Maximum overcoating time	48 hours

Pack Sizes

This product is available in the following pack sizes –
5ltrs (1.3 US gallon), 20ltr (5.3 US gallon).

Colour

Base component – Red, Black, Grey
Activator component – pale straw

Over-coating times

Minimum - the material can be over-coated as soon as it is touch dry, approximately 4 hours at 20°C (68°F).

Maximum - the over-coating time should not exceed 48 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/ 60-86°F)

Other Technical Documents

Safety Data Sheets	-	Base & Activator components
Product 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.