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# TECHNICAL DATA SHEET

## Anti-Corrosion Aluminium

**ThistleBond 'Anti-Corrosion Aluminium'** is a high performance anti-corrosive coating, designed for use as a long term protection system of new and existing steel structures where surface preparation is restricted.

**ThistleBond 'Anti-Corrosion Aluminium'** is based on a complex blend of epoxy resins and a specially formulated polyamine curing system, reinforced with a unique combination of anti-corrosive pigments and rust penetrants to produce a system which provides the optimum adhesion, weather and corrosion resistance in virtually any environment.

**ThistleBond 'Anti-Corrosion Aluminium'** is easy to apply by brush, roller or spray and has excellent adhesion to blast cleaned or manually prepared surfaces with good compatibility with existing coatings which cannot be removed.

**Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.**

### SURFACE PREPARATION

All loose rust, millscale and loosely adherent coatings must be removed. Surfaces that can be abrasive blast cleaned should be prepared to a minimum standard Sa2 1/2 (BS 7079 or equivalent) ensuring a surface profile of 75 microns.

Where blast cleaning is not possible then the following methods of surface preparation should be used: high pressure water jetting, mechanical wire brushing, needle gun, mechanical grinders etc. to achieve minimum standard St2.

In coastal environments and on badly pitted steel work, high pressure water blasting is the preferred method of preparation in order to ensure complete removal of salts and corrosion products from pitted areas.

When mechanical cleaning and wire brushing is used, special attention must be paid to pitted areas to remove all loosely adherent rust and corrosion products and expose a sound substrate.

All oil and grease must be removed by the use of **ThistleBond 'SFE Thinners'** prior to carrying out surface preparation.

### MIXING

**ThistleBond 'Anti-Corrosion Aluminium'** is a two component material which must be mixed together prior to use.

The resin and hardener components should be thoroughly stirred to incorporate any slight separation, whilst stirring the hardener unit, the contents of the resin unit should be added. Continue stirring until a homogeneous mix is obtained.

The mixed material must be used within 1 1/2 hours of mixing at 20°C (68°F).

### APPLICATION

Do not apply when temperatures are below 7°C or when the relative humidity exceeds 90% or the surface temperature is less than 3°C above the dew point.

**ThistleBond 'Anti-Corrosion Aluminium'** can be applied by brush, roller or spray. When application is carried out by brush, two coats may be required to achieve the correct film build.

When airless spray application is used, a tip size of 15-18 thou is recommended with a tip pressure of approximately 2,500 psi.

For application by spray up to 10% **ThistleBond 'SFE Thinners'** may be required depending on coating temperature.

Only sufficient material should be mixed that can be applied within the usable life of the product.

All equipment should be cleaned IMMEDIATELY after use with **ThistleBond 'SFE Thinners'**.

**Theoretical Coverage Rate**7 m<sup>2</sup>/litre at 125 microns dft (75 ft<sup>2</sup>/litre at 5 mils dft)**Recommended Film Thickness**

Wet 140 microns (5.5 mils)

Dry 125 microns (5 mils)

**PHYSICAL CONSTANTS****Mixing Ratio** 1 part resin to 1 part hardener by volume.**Appearance** Resin - Thixotropic Metallic Liquid  
Hardener - Thixotropic Light Brown Liquid**Drying & Cure Times at**

<b>20°C (68°F)</b>	Usable Life	1 1/2 hours
	Touch Dry	6 hours
	Minimum Overcoating	16 hours
	Maximum Overcoating	24 hours
	Full Cure	7 days

**Volume Solids** 90%**V.O.C.** 78 gms/litre**Shelf Life** Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).**PHYSICAL PROPERTIES**

<b>Direct Pull Adhesion</b>	63 kg/cm <sup>2</sup> steel (900 psi)
ASTM D4541	
<b>Humidity Resistance</b>	Unaffected 5,000 hours exposure
BS3900 Part F2	
<b>Salt Fog Resistance</b>	Excellent, unaffected after 10,000 hours exposure
ASTM B117	
<b>Impact Resistance</b>	Direct, Pass 0.2" (5 mm)
BS3900 Part E3	Reverse Pass 0.2" (5 mm)
<b>Tensile Shear Adhesion</b>	175 kg/cm <sup>2</sup> (2500 psi)
ASTM D1002	

**HEALTH AND SAFETY**As long as normal good practice is observed **ThistleBond 'Anti-Corrosion Aluminium'** can be safely used.

Vapour masks should be worn for spray application.

A fully detailed **Material Safety Data Sheet** is either included with the material or is available on request.**PACKAGING**

Supplied in 2.5 litre units

The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests. Detailed specifications are available on request from the company.


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FOR FURTHER INFORMATION PLEASE CONTACT