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# TECHNICAL DATA SHEET

## 152 SFE AS

### Two Component Solvent Free Epoxy Coating

**ThistleBond '152SFE AS'** is a high performance solvent free high build system designed for use as a corrosion resistant coating for steel and concrete structures with a minimum of surface preparation.

The **ThistleBond '152SFE AS'** formulation utilises a special blend of epoxy resins and a polyamino-amide curing system reinforced with inert pigments and inorganic fillers to produce a coating with good physical properties and corrosion resistance.

**ThistleBond '152SFE AS'** offers exceptional application and film build properties enabling high film thicknesses in a single coat by airless spray to produce a system with a high degree of corrosion resistance and is ideal for ballast tanks, bridges, offshore maintenance etc.

**ThistleBond '152SFE AS'** can be applied to damp steel surfaces and offers a high tolerance to manually prepared substrates.

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

#### SURFACE PREPARATION

Surfaces should be clean and free from oils, bacteria or algal growth.

**Steel Surfaces:** optimum performance will be obtained on surfaces prepared to minimum Sa 2½ in accordance with BS 7079: Part A11989 or equivalent. Where blast cleaning is not possible, surfaces should be prepared by mechanical wire brushing, grinding or high pressure water jetting (typically 5000 psi) to achieve Swedish Standard St2-St3 taking particular care when cleaning badly pitted surfaces.

Previously coated surfaces should be abraded using 180grade emery paper. Any loosely adherent coating must be removed and surrounding area feather edged.

#### MIXING

**ThistleBond '152SFE AS'** is a two component material comprising a base component and activator component which must be mixed together prior to use.

Both components should be thoroughly stirred to incorporate any slight separation prior to mixing. Whilst continually stirring the base, the activator component should be slowly added with mixing continuing until completely homogeneous.

After mixing fully, the material should be transferred to another container with the original container scraped clean into this new container and further mixing then carried out to ensure complete incorporation.

The mixed material must be used within 50 minutes at 20°C (68°F). This time will be reduced at higher temperatures and extended at lower temperatures.

#### APPLICATION

Application should not be carried out at temperatures below 5°C (41°F).

**ThistleBond '152SFE AS'** should be applied by airless spray, but can also be applied by brush to small areas. Typical Airless and Air Assisted Airless Spray Settings are:

Minimum pump ratio: 32:1  
Minimum 3000 psi at spray tip  
19-23 thou spray tip

**ThistleBond '152SFE AS'** should be applied as a single coat, where stripe coating is required, a wet on wet technique should be used. Where two coats or overcoating is required the first coat will require abrading/flatting off before subsequent coats are applied.

All equipment must be cleaned IMMEDIATELY after use with **ThistleBond Cleaner**.

**Theoretical Coverage Rate**

2 m<sup>2</sup>/litre at 500 microns dft (21.5 ft<sup>2</sup>/litre at 20 mil dft).

**Recommended Film Thickness**

Wet 250-750 microns (10-30 mils)

Dry 250-750 microns (10-30 mils)

Detailed working recommendations are available from the Technical Centre on request.

**PHYSICAL PROPERTIES**

**Mixing Ratio** 3 parts base to 1 part activator by volume.

**Appearance** Base Thixotropic Coloured Liquid  
 Activator Opaque Liquid

**Drying & Cure Times**

<b>at 20°C (68°F)</b>	Usable Life	50 minutes
	Touch Dry	16 hours
	Hard Dry	24 hours
	*Maximum Overcoating	8 hours
	Full Cure	7 days

\*Note: This maximum overcoating time only applies when the product is overcoated with itself as a stripe coat. Any other overcoating will require abrasion of the surface.

**Volume Solids** 100%

**V.O.C.** Nil

**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>Abrasion Resistance</b>	40 mgm weight loss per 1000 cycles - 1 kg load - CS17 wheel
ASTM D4060	
<b>Impact Resistance</b>	2.6 Joules (23 in lbs)
ASTM G14	
<b>Dry Heat Resistance</b>	100 (212°F)
ASTM D2485	
<b>Direct Pull Adhesion</b>	63 kg/cm <sup>2</sup> (900 psi) steel
ASTM D4541	
<b>Water Vapour Permeability</b>	1.2 gm.mm/m <sup>2</sup> /24hrs
ASTM D1653	
<b>Salt Fog Resistance</b>	Excellent, unaffected after 10,000 hours exposure
ASTM B117	
<b>Humidity Resistance</b>	Unaffected 5,000 hours exposure
BS3900 Part F2	

**HEALTH AND SAFETY**

As long as normal good practice is observed **ThistleBond '152SFE AS'** can be safely used.

Protective gloves should be worn during use.

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

**PACKAGING**

Supplied in 5 litre packs.

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.

FOR FURTHER INFORMATION PLEASE CONTACT



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