

# abecote® SF 321

Solvent Free LOW FRICTION COATING

## **DESCRIPTION**

Two component, solvent free, pigmented polyamide cured epoxy, modified to improve slip factor.

# **USES**

Lining of surfaces to prevent build-up of low abrasion materials, particularly in feed meal silos.

## **ADVANTAGES**

- Brush applied low friction lining
- Greatly reduces build-up problems when storing fine powders, meal etc
- · Allows free flow of materials along coated surfaces
- Easy to apply
- Economical

PROPERTIES OF WET MATERIAL			
Mixing ratio	Not advisable		
Density (typical)	1.22 g/cm <sup>3</sup>		
Colour			
Base	White		
Activator	Clear		
Mixed	Gloss		
Flash point:	+120 °C		
Dilution	Do not dilute		
Consistency	High viscosity liquid		
Shelf life	2 years from date of manufacture		

PROPERTIES OF DRY FILM			
Max service temperature	Dry: Ambient Immersion: Not recommended		
Abrasion resistance (Taber)	Using 2xCS 10 wheels loaded with 1000 g each 112 $\mu m$ film loss. 45 $\mu m$ after 1000 revolutions		
Bond Strength	> 8.8 MPa		
Toxicity	Cured material is inert and harmless		
Water tainting	Will not taint water		
Chemical resistance	Will resist vegetable oils		

PROPERTIES DURING APPLICATION				
Application by	Brush, short fibre roller			
Pot life @25 °C	40 min/500 ml			
Volume solids	100%			
Recommended av. dft per coat	125 μm			
Theoretical coverage for above dft	8 m²/ℓ on smooth surface			
Wet film thickness at above	125 μm			
Maximum recommended wft	150 μm			
Practical coverage for estimating purposes	6.5 m <sup>2</sup> /ℓ			
Recommended number of coats	2 minimum			
Curing time	Touch dry: 4 hrs Hard dry: 12 hrs Full cure: 7 days			
Over-coating time @25 °C	Minimum 12 hrs Maximum 48 hrs			
Application temperature range	10 °C to 40 °C			
Do not apply coating if humidity is in excess of 85% @ 21 °C or 75% @ 10 °C				
Fire resistance of wet film	Non-flammable			
Equipment clean up	abe® super brush cleaner			

## **SURFACE PREPARATION**

Steel should be grit blasted to a minimum standard of Sa 2  $\ensuremath{\mathcal{V}}_2$  on the Swedish Code of Practice SIS 0 55900.

Concrete should be free of all laitance and preferably should be lightly abrasive blast cleaned. All blemishes in the surface such as popouts, omegas, blowholes and honeycomb should be patched with **epidermix®** 201. This should be left overnight to dry and should be sanded smooth. Over-coating of **epidermix®** 201 should be carried out within 48 hours. All debris of preparation must be completely removed.

# **PRIMING**

Steel should be primed with a coat of **abecote® 384**. If maximum smoothness of coating is required this may be overcoated with a coat of **abecote® 386** which should be rubbed down after drying overnight. Concrete should be primed with a coat of **abecote® 386**.



If maximum smoothness of coating is required, a second coat should be applied the following day, left overnight and then rubbed down. All debris of rubbing down must be completely removed.

#### **MIXING**

Stir contents of each container very well.

Add the Activator to the Base and stir together for at least 5 minutes using a flat paddle. It has been found that mechanical mixing gives better dispersion than manual mixing.

A suitable mixing method would be a slow speed electric drill (approximately 200 rpm) fitted with a paddle.

If only part of a kit is to be used, add one volume Activator to two volumes Base. Measuring must be accurate and separate stirrers and containers used for proportioning each component.

#### **APPLICATION**

**abecote® SF 321** must be applied to the primed surface within the over-coating time stipulated for the specific primer.

Application may be by brush or short fibre roller.

To achieve optimum finish the first coat of **abecote® SF 321** may be rubbed down and then over-coated with a second coat.

At least seven days must elapse between applying the last coat and putting the installation into service.

## SHELF LIFE

Two years from date of manufacture.

#### **PACKAGING**

5 & dual pack tins.

## **MODEL SPECIFICATION**

The low friction coating will be **abecote® SF 321**, a two-component, filled, solvent free polyamide epoxy resin system, applied in accordance with **a.b.e.®** recommendations.

# **HEALTH & SAFETY**

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The safety data sheet is available from your local **a.b.e.**® sales representative.

## **IMPORTANT NOTE**

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst a.b.e.®endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot accept any liability for application – because a.b.e.®has no direct or continuous control over where and how a.b.e.® products are applied.

## **FURTHER INFORMATION**

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.

**a.b.e.**® has a wealth of technical and practical experience built up over the years in the company's pursuit of excellence in building and construction technology.

Please consult our website for our latest datasheets.

The table below shows the coefficient and (angle) of friction for each of a selection of material surfaces and grain combinations. These results are comparative but show the efficacy of abecote® SF 321.

	Barley	Grit Maize	Maize Chaff (flakes)
Stainless steel	0.26 (14.8°)	0.30 (16.7°)	0.30 (16.9°)
Steel	0.38 (20.8°)	0.61 (31.5°)	0.51 (27.2°)
Plain concrete	0.43 (23.4°)	0.58 (30.2°)	0.62 (32.0°)
abecote® SF 321	0.25 (13.9°)	0.22 (12.1°)	0.23 (13.1°)

