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TECHNICAL DATA SHEET

Floor Seal HS

ThistleBond 'Floor Seal H.S.' is a high performance high solids epoxy coating designed for use as a single coat flooring system for concrete substrates.

ThistleBond 'Floor Seal H.S.' consists of a unique blend of epoxy resins combined with polyamino adducts which have been specifically formulated to provide the optimum level of adhesion, abrasion, impact and chemical resistance which will provide excellent long term protection to industrial floors operating within aggressive environments.

ThistleBond 'Floor Seal H.S.' is ideal for use in workshops, garages, factories, warehouses etc.

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

SURFACE PREPARATION

All surfaces should be clean, dry and free from oils, grease and any other contamination.

Surfaces should be thoroughly abraded or lightly abrasive blasted to remove all surface laitence and vacuumed to remove loose dust.

MIXING

ThistleBond 'Floor Seal H.S.' is a two component material comprising resin and hardener components which must be mixed together prior to use.

Stir the resin component, continue stirring whilst adding all the contents of the hardener component and mix until homogeneous. To ensure thorough mixing it is advisable that the mixed product is transferred to another container and the original container is scraped out, and further mixing carried out to ensure a homogeneous mix is obtained.

The mixed product must be used within 1 hour of mixing at 20°C (68°F).

APPLICATION

ThistleBond 'Floor Seal H.S.' should not be applied when the relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.

It is not advisable to apply **ThistleBond 'Floor Seal H.S.'** when the surface is less than 10°C (50°F).

ThistleBond 'Floor Seal H.S.' can be applied by good quality brushes or medium pile rollers. The coating should be applied evenly and the surface completely 'wetted out' with regular checks being made to ensure the correct film thickness is applied.

When application involves areas of an intricate nature it is advisable to split the mixed material into small quantities and use two applicators to avoid the material becoming unusable before application is complete.

NOTE: On surfaces of variable suction / porosity a second application maybe required to give the optimum aesthetic appearance.

Slip Deterrent System

ThistleBond 'Floor Seal H.S.' should be mixed and applied as before to the surface. Whilst the coating is still wet the appropriate grade of **ThistleBond 'L.D. Grip'** can be scattered into the surface at approximately 25 gm (1 oz.) per square metre, to produce a medium density grip. After overnight curing any loose aggregate can be removed and if required a further seal coat of **Thortex Floor-Tech H.S.** can be applied.

Alternatively, **ThistleBond 'L.D. Grip'** can be stirred into the mixed **ThistleBond 'Floor Seal H.S.'** prior to application, and then applied by roller to provide a one coat slip deterrent finish.

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

Theoretical Coverage Rate

6.6 m² / litre at 125 microns dft (70 ft² per litre at 5 mils dft)

Recommended Film Thickness

Wet 150 - 175 microns (6-7 mils)

Dry 125 - 150 microns (5-6 mils)

PHYSICAL CONSTANTS

Mixing Ratio 2 parts resin to 1 part hardener by volume

Appearance Resin Viscous Coloured Liquid
Hardener Coloured Liquid

Drying & Cure times at 20°C

Usable Life	45 minutes
Touch Dry	6 hours
Hard Dry	24 hours
Minimum Overcoating	24 hours
Maximum Overcoating	48 hours
Full Cure	7 days

Volume Solids 85%

V.O.C. 137 gm/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

Abrasion Resistance 30mgm weight loss per
ASTM D4060 1000 cycles-1kg load-
CS17 wheel

Impact Resistance 3.95 Joules (35 in lbs)
ASTM D2794

Dry Heat Resistance 135°C (275°F)
ASTM D2485

Direct Pull Adhesion 35kg/cm² (500psi) -
ASTM D4541 concrete (Concrete
Failure).

Scrub Resistance >10,000 cycles
ASTM D336

Tensile Strength 160kg/cm² (2275psi)
ASTM D683

Scratch Resistance No Failure 2.5kg (5.5lbs)
BS 3900 Part E2 Load

FOR FURTHER INFORMATION PLEASE CONTACT

HEALTH AND SAFETY

As long as normal good practice is observed **ThistleBond 'Floor Seal H.S.'** can be safely used.

Protective gloves should be worn in confined areas.

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 20 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.

ThistleBond

www.thistlebond.com

ThistleBond Division of E. Wood Ltd.
Standard Way, Northallerton, N. Yorks. U.K. DL6 2XA
Tel: +44(0)1609 780170 Fax: +44(0)1609 780438 & 777905
E Mail: info@thistlebond.com