



High Performance Paint Product Data Sheet



TUFF COTE FINISH (SINGLE & TWO PACK)

49-2X0X JUN 09



DESCRIPTION: TUFF COTE FINISH is a water based polyurethane topcoat with excellent toughness, adhesion, gloss retention and mar resistance. This product can be used by itself (single pack) or combined with DIAMOND HARDENER (2-pack system) to form a highly durable coating suitable for medium to heavy industrial applications. With excellent adhesion and fast set-up time, this product is a replacement for solvent-borne polyurethanes with significant reduction in VOC emissions. Adopting European WB resin technologies, TUFF COTE FINISH is formulated to be air-dried, or forced-dried at low temperature (below 60°C).

TYPICAL USES: TUFF COTE FINISH is designed to work with DIAMOND HARDENER, to produce a topcoat with high durability, impact resistance and chemical resistance. TUFF COTE FINISH is designed to go over a wide variety of primers, including GALVANISED IRON PRIMER, EPS-10 ETCH PRIMER and TUFF COTE DTM. See next page or the specification sheet for further details. To achieve a smooth finish, airless spraying is highly recommended. However, this product can also be applied by a brush or roller over small areas.

PERFORMANCE: This is a premium waterborne polyurethane top coat with ability to self-crosslink or to be cured by a hardener. TUFF COTE FINISH is a waterborne coating that requires at least 24 hours to reach 80% of its final strength and 2 weeks to reach 95% final strength. It is recommended that care should be taken while handling and transporting to avoid damage to the fresh coating.

LIMITATIONS: This is a waterborne product, which is expected to be applied over well-degreased surfaces. Depending on the conditions, the cure time may be extended; hence, it is important to protect painted surfaces to avoid any damage. Always mix well before use as the contents may settle.

TECHNICAL DATA:

Resin:	Polyurethane dispersion
Solvent:	Water
Finish:	Gloss (60-70% @ 60°) Satin (10-20% @ 60°)
Colour:	Clear/Full colour range
Touch Dry (minimum):	90 min @ 25°C, 30 min @ 60°C
Recoat Time (minimum):	120 min @ 25°C, 40 min @ 60°C
Primer:	See over
Number of Coats:	2
Dry Film Thickness:	70 microns
Wet Film Thickness:	150 microns
Durability:	
Thinning and Clean Up:	Water
VOC:	
Pot Life:	120 minutes @25°C.
Mixing Ratio:	10:1 by volume (Tuff Cote Finish:Diamond Hardener)
Pack Size:	4 Litre

SPREAD RATE:

Theoretical Coverage: 10-12 m²/litre/coat.
Coverage depends on surface profile and porosity.

COMPUTER CODES:

Tuff Cote Finish Gloss Accent	49-2705
Tuff Cote Finish Satin Accent	49-2305

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SURFACE PREPARATION:

(Refer to "Surface Preparation and Paint Systems" for full details). To ensure a successful application all surfaces to be coated must be degreased, clean and dry.

TUFF COTE FINISH is an excellent general industrial topcoat which offers superior toughness and abrasion resistance. For best results, use DIAMOND HARDENER in combination with TUFF COTE FINISH to produce a high performance and durable coating for protection of a wide variety of surfaces.

MIXING INSTRUCTIONS (FOR USE WITH DIAMOND HARDENER):

First, take TUFF COTE FINISH and mix well for at least 60 seconds, using a wide paddle. Add DIAMOND HARDENER and mix well for at least 60 seconds, ensuring the sides and bottom of the pot are mixed in. Please note, the product will thicken when DIAMOND HARDENER is added; hence extra care should be taken to ensure the two parts are dispersed properly. Allow the mixture to stand for 5 – 10 minutes, this will allow the products to initiate their chemical reaction. Stir the mixture for further 1 – 2 minutes before commence painting.

TUFF COTE FINISH is designed to be coated over various COTEC primers/sealers providing excellent weather, chemical and mechanical resistance. The following is a guide for coating some general surfaces.

STEEL/IRON:

Remove all rust, grease and oil. Apply 1 coat of TUFF COTE DTM or GALVANISED IRON PRIMER. Allow the primer to through-dry before applying 2 coats of TUFF COTE FINISH. Allow at least 2 hours between coats.

ALUMINIUM / BRONZE:

Remove all grease/oil. Apply 1 coat of TUFF COTE DTM or EPS-10 ETCH PRIMER or GALVANISED IRON PRIMER. Allow the primer to through-dry before applying 2 coats of TUFF COTE FINISH. Allow at least 2 hours between coats.

GALVANISED IRON:

Galvanised iron sheets that are lapped must be coated in the lap areas to stop corrosion.

NEW:

All new galvanised iron has an oil/grease coating from roll forming and it must be removed before coating. This can be done by leaving the roof exposed to the elements for 3 months before painting, or by using a suitable roof wash solution. Apply 1 coat of TUFF COTE DTM or GALVANISED IRON PRIMER; followed by 2 coats of TUFF COTE FINISH. Allow at least 2 hours between coats.

OLD:

Wash all area with a suitable roof wash solution. Areas of rust must be wire-brushed, to remove loose rust etc. Apply RUSTKILL to convert any remaining rust. Wash thoroughly and allow to dry. Apply 1 coat of TUFF COTE DTM or GALVANISED IRON PRIMER; followed by 2 coats of TUFF COTE FINISH. Allow at least 2 hours between coats.

If roofs are being used for collection of drinking water, it is strongly recommended that roof down pipes are disconnected until after the first major rainfall event ($\geq 10\text{mm}$.)

PLASTIC SURFACES:

Generally, all plastic surfaces should be lightly sanded to ensure physical adhesion. Apply 1 coat of TUFF COTE DTM followed by 2 coats of TUFF COTE FINISH. Allow at least 2 hours between coats.

Note: Plastic surfaces are generally very difficult substrates. It is very important that test patches are carried out ensuring the coating is fit for purpose. Different surfaces and materials should be tested on a case-by-case basis.

OTHER SURFACES:

Please seek advice from COTEC representatives for suitable products for your applications.

Note: Commencement of work on a surface means in general you accept that surface. If any doubt about condition etc, seek advice.

APPLICATION:

See MIXING INSTRUCTIONS above, stir well before application.

Brush and Roller:

Use product as supplied.

Roller:

Use an 8-12mm nap dacron roller.

Air Assisted airless:

Product may need to be thinned 5-15% with water to bring viscosity closer to 20 sec F4.

Spray:

Airless spraying is recommended. Pressure 2,500psi max and a 209 tip for detailed work and 413 tip for general application. No thinning is necessary. Best performance is achieved by an initial low-build pass (tack coat), followed by a full spray of finish coat.

Force Drying:

This product is suitable for force drying. However, the drying conditions should be strictly controlled (under 60°C) to prevent any blistering or mud-cracking.

THINNING & CLEAN UP:

Maximum thinning is 2%. Clean up with water and detergent.

ENVIRONMENTAL:

This formulation uses the latest technology with low toxicity, ensuring environmental issues are not compromised. DO NOT POUR paint or wash down storm water or water courses. ALWAYS dispose of in accordance with local Government regulations. Soak up spills with absorbent material and dispose of properly. If spraying use suitable respiratory protection. Refer to the MATERIAL SAFETY DATA SHEET.