



Tufcote™ 3.5 HG-D™ High Gloss Alkyd DTM



GENERAL

DESCRIPTION

A high-gloss, single-package, 3.5 lbs./gal. VOC conforming, acrylic-modified V-T alkyd enamel. The resulting coating is design to be quick drying and very durable in non-corrosive environments.

SUGGESTED USES:

As a quality high-gloss alkyd topcoat on carbon steel, dry wall, and wood where:

- Very quick dry times are required
- Wide variety of custom colors are needed
- Single-package easy-to-use product is required
- DTM (direct-to-metal) is required for interior exposure
- Application by brush and roller, in addition to spraying, may be necessary
- Electrostatic spray application is required

NOT RECOMMENDED FOR:

- Immersion service
- Harsh chemical environments
- Over galvanized metal
- Prolonged exterior exposure – will chalk

COMPATIBILITY WITH OTHER COATINGS

Tufcote 3.5 HG-D should be used over properly primed surfaces in exterior exposures. Recommended primers include: Tufcote 2.8 PR™, Tufcote 3.3 PR™, Tufcote 3.5 PR™, Corlar® 2.1 PR™, Corlar 3.2 PR™ and Corlar LV PR™. Tufcote 3.5 HG-D can be applied DTM (direct-to-metal) in mild interior exposures. It may be used over most aged and hard cured coatings in good condition. Testing for lifting, bubbling and adhesion is recommended to assure compatibility with unknown coatings. Contact Axalta Coating Systems for specific recommendations.

PERFORMANCE PROPERTIES

Chemical	Fair in mild chemical environments
Humidity	Good
Weather	Fair

COLOR

Select factory pack colors, custom colors available on request.

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.



MIXING

COMPONENTS

Select factory packaged & mix colors. Bases are short filled to allow for colorant addition:

- 1LB34P™ 124 oz/gal
- 2MB34P™ 120 oz/gal
- 3DB34P™ 116 oz/gal
- 4NB34P™ 112 oz/gal

Not all colors available in all sizes. Please call Axalta Customer Service for availability

ACTIVATION

No activation required. Mix pigmented portion until uniform in color.



MIXING AND REDUCTION

No reduction necessary. Any addition of thinner will eliminate compliance with air pollution regulations limiting VOC's to 3.5 lb/gal. If 3.5 VOC is not required, thin using up to 10% Axalta T-8805™ for spray or brush and Y-32035™ up to 10% for electrostatic spray.

APPLICATION THINNERS

Spray, Brush T-8805
Electrostatic Spray Y-32035

INDUCTION TIME

None

POT LIFE

Not applicable.



APPLICATION

APPLICATION CONDITIONS

Do not apply if material, substrate or ambient temperature is below 40°F (4°C) or above 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%.

SURFACE PREPARATION

Surface should be clean dry and free of any oil and grease when extra corrosion resistance is required, prime steel surfaces with Tufcote 2.8 PR™, Tufcote 3.5 PR™ or other appropriate primer.

APPLICATION EQUIPMENT

Apply by spray, brush or roll. Spray application is the preferred method of application due to fast dry properties. Manufacturers listed below are a guide. Others may be used. Changes in pressure and tip size may be required to achieve proper application.

Hiding – Some colors may require multiple coats to achieve hiding.

Roll

Wooster® Pro/Doo-Z ¼" - ½" nap roller cover.
Keep roll wet. Roll in one direction, rewet, then cross roll.

Brush

Wooster China Bristle Brush 2"-4"

Spray

Conventional Pressure Fed Liquid

	<u>Binks</u>	<u>DeVilbiss</u>	<u>Sata</u>
Spray Gun:	2001	JGA	K3RP
Fluid Nozzle:	63CSS	FF (1.4)	1.1
Pot Pressure:			10
Atomizing Pressure			36
Air Cap:	63PR	765	

Fluid lines 3/8" ID or larger are required for proper fluid delivery.

HVLP Pressure Fed

Devilbiss	GTi	1.4	2000
Binks	Mach 1	94 (1.4)	94P

Airless Spray

Pump: Graco Extreme 33:1
Airless Gun: Graco 208663
Fluid Hose: 3/8" x 100' max.
Tips: 411-517
Minimum pressure to avoid fingering: 2400 psi min

CLEAN UP THINNERS

T-8805 or Y-32035



DRY TIMES

Cure Times at suggested DFT

	<u>70°F (21°C)</u>
To Touch	20 minutes
To Handle	1 hour
To Recoat	after 30 minutes up to 2 hours, then after 24 hours
Hard Dry	4 hours



PHYSICAL PROPERTIES

Maximum Service Temperature:	200°F (93°C) in continuous service
Gloss (ASTM D 523)	High gloss 90+ @ 60°
Weight Solids (Avg. varies by color):	61% ± 3% average
Weight per gallon-(Avg. varies by color):	8.96 ± 0.5 lb/gal average
Flash Point-Tag Closed Cup:	- 73 L
Volume Solids (Avg. varies by color):	49% ± 2% average
Shipping Weight (varies by color):	1 gallon container: 11 lbs 5 gallon container: 47 lbs
Shelf Life:	1 year minimum
Theoretical Coverage Per Gallon:	785 ft² /gal at 1 mil DFT 392 ft² /gal at 2 mil DFT

Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.

Suggested Film Builds:	4.0 mils (100 µm) wet 2.0 mils (50 µm) dry
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Application by brush and roller may require additional coats to achieve recommended films thickness.

STORAGE CONDITIONS

Store in a dry, well-ventilated area. Storage conditions should be between -30°F (-34°C) and 120°F (-48°C). Tufcote 3.5 HG-D may settle. Agitate before each use.

THEORETICAL VOC

VOC less water and exempt compounds

Tufcote 3.5 HG-D no reduction	3.5 lbs/gal max.
Tufcote 3.5 HG-D reduced 10% with T-8805™	3.8 lbs/gal max.

ASTM INFORMATION

Physical properties are for Tufcote 3.3 PR™ and Tufcote 3.5 HG-D. For other system recommendations, please contact Axalta Coating Systems.

Paint System	Tufcote 3.3 PR/Tufcote 3.5 HG-D/Tufcote 3.5 HG-D 681-704™ / 34P™ / 34P™
Type/Color	alkyd red oxide / alkyd white / alkyd white
DFT	2.1 / 2.4 / 2.2

TEST

Salt Fog (ASTM B117)

RESULTS

1000 hours	no rusting, very few #6 blisters at the scribe
2000 hours	no rusting, very few #6 blisters at the scribe
3000 hours	no rusting, few #4 & #6 blisters at the scribe



Relative Humidity (ASTM D2247)	1000 hours	no rusting, few #2 blisters on the face of the panel
	2000 hours	no rusting, few #2 blisters on the face of the panel
	3000 hours	no rusting, few #2 blisters on the face of the panel
Dry Heat (ASTM D2485)	250°F for 24 hours	no cracking, no blisters, no loss of adhesion, severe discoloration
Electrical Resistance (ASTM D2457):		5.2X10 ¹⁵
Adhesion (ASTM D4521 A2):	1467 psi	cohesive failure within the primer
Cleveland Cond (ASTM D4585):	1000 hours	no rusting, few #2 and dense #8 blisters on the face of the panel
UV Con (ASTM D4587)*	3000 hours	Gloss before exposure 89.8
		Gloss after exposure 2.7
		Evaluation no rusting, no blisters, no delamination
Impact (ASTM D2794):	0 inch pounds	
Mandrel Bend (ASTM D522):	% Elongation - 0%	
Taber Abrasion (ASTM D4060):	weight loss in grams - 0.38	

*8 hr UV @ 50°C, 4 hr condensation @ 40°C, gloss readings @ 60°

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

All technical advice, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable, and are intended for professional use by persons having skill and know-how at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Such recommendations, technical advice or services are not to be taken as a license to operate under or intended to suggest infringement of any existing patent.

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