



Tufcote™ 3.5 HG-P™ High Gloss Alkyd with Polyurethane Modification



GENERAL

DESCRIPTION

A high-gloss, two-package, 3.5 lbs/gal VOC conforming acrylic-modified V-T alkyd enamel with polyurethane modification. The resulting coating is designed to be very durable and to deliver very quick dry times with improved solvent resistance, hardness, gloss and color retention over conventional alkyd enamels.

SUGGESTED USES:

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

- Very quick dry times are required
- A wide variety of custom colors are needed
- Improved performance vs. conventional alkyd coatings is desired
- 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-P 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-P 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

Tufcote 3.5 HG-P 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

Tufcote FG-034 Activator pint container 100% fill (16 oz.)

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



MIX RATIO

Component	Part by Vol.
Tufcote 3.5 HG-P Base	8
Tufcote FG-034 Activator	1

ACTIVATION

Power mix pigmented portion until uniform in color. Mix 8 parts Tufcote 3.5 HG-P base with 1 part Tufcote FG-034 Activator

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 4% 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

8 hrs @ 77°F and 50% R.H.



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 or dirt. Prime bare steel with Tufcote 2.8 PR™, Tufcote 3.3 PR™, Tufcote 3.5 PR™. Tufcote 3.5 HG-P may be applied direct to metal in non-corrosive interior environments.

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 – Factory packaged colors intended to hide in 2-3 mils dry film thickness. As Tufcote 3.5 HG-P alkyd enamel is lead and chromate free, some bright custom colors (reds, yellows and oranges) will require multiple coats to obtain complete 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

	Binks	DeVilbiss	Sata
Spray Gun:	2001	JGA	K3RP
Fluid Nozzle:	63BSS	FF (1.4)	1.1
Pot Pressure:			10
Atomizing Pressure			36
Air Cap:	63PB	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):	62% ± 4% average
Weight per gallon-(Avg. varies by color):	9.34 lb/gal average
Flash Point-Tag Closed Cup:	- 73 L
Volume Solids (Avg. varies by color):	51% ± 1% average
Shipping Weight (varies by color):	1 gallon container: 11 lbs pint container: 1.5 lbs
Shelf Life:	1 year minimum
Theoretical Coverage Per Gallon:	819 ft ² (20.1 m ² /L) /gal at 1 mil DFT 410 ft ² (10.0 m ² /L) /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-P may settle. Agitate before each use.

VOC REGULATIONS

VOC less water and exempt compounds

Tufcote 3.5 HG-P activated with FG-034	3.50 lbs/gal max.
Tufcote 3.5 HG-P activated with FG-034 & reduced 4% with T-8805	3.64 lbs/gal max.



ASTM INFORMATION

Physical properties are for Tufcote 3.5 HG-P over Tufcote 3.3 PR to 5 mils DFT. For other system recommendations, please contact Axalta Coating Systems.

TEST	RESULTS	
Salt Fog (ASTM B117)	1000 hours	no rusting, no blisters
	2000 hours	no rusting, very few #4 blisters at the scribe
	3000 hours	no rusting, medium #2 blisters at the scribe
Adhesion (ASTM D4521 A2):	1344 psi	
MEK Resistance:	with FG-034	16 D Rubs
	without FG-034	6 D Rubs
QUV-A Bulb (500 hours)	with FG-034	86.9% gloss retention (white)
		78.7% gloss retention (blue)
		81.4% gloss retention (red)
	without FG-034	74.7% gloss retention (white)
		54.1% gloss retention (blue)
Pencil Hardness (24hours/7hours)		54.1% gloss retention (red)
	with FG-034	3B/3B
	without FG-034	6B/3B

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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