



Product Data

WES-THANE™ 3.5 VOC Acrylic Urethane

PRODUCT DESCRIPTION

WES-THANE™ 3.5 Low VOC Acrylic Urethane is a high performance acrylic urethane that has a maximum VOC (Volatile Organic Compounds) content of 3.5 pounds/gallon sprayable (420 grams/liter). WES-THANE™ 3.5 Low VOC is available as an intermix system with a wide color selection.

When WES-THANE™ 3.5 Low VOC is used with 2K Waterborne Primer WP-230, Fleet and Original Equipment Manufacturers have a VOC “system” to comply with regulations limiting coatings to a maximum VOC of 3.5 pounds/gallon (420 grams/liter) of sprayable material. Refer to your local, state, or federal regulatory agencies for further details.

TECHNICAL DATA

• Mixing ratio by volume	3:1	• Coverage @ 1 mil dry (white)	890 sq ft/gallon
• VOC (maximum sprayable)	3.5 lbs/gal	• Performance after one week air dry	420 g/liter
• Viscosity (sprayable)		- Impact resistance (80 in/lbs)	
#4 Ford Cup	19-24 sec.	direct	Pass
#2 Zahn Cup	21-24 sec.	indirect	Pass
• % Volume Solids - sprayable (approx)	52%	- Flexibility (1/8" conical mandrel)	Pass
• Flash point (average) - Tag Open Cup	80°F	- Solvent resistance	No effect
• Recommended dry film thickness(2 coats)	2.0-2.5 mils	(MEK/Toluene/Gasoline/Oil)	
• Gloss		-Chemical resistance (24 hr. contact)	
60°	90	10% Hydrochloric acid	No effect
20°	80	10% Sulfuric acid	No effect
• DOI (Average)	80	10% Ammonium hydroxide	No effect
• Pencil Hardness at 1 week dry	HB	- Salt spray resistance -250 hrs	No effect
• Dielectric strength over steel	1800 volts/mil (dry)	- Humidity resistance - 100 hrs	No effect
(white)			

SURFACE PREPARATION

Bare Substrates*: Steel, properly treated Galvanized Steel, Aluminum, or Fiberglass

**Note: With the inconsistencies of substrates, consult your local Sales Representative for system recommendations and substrate testing.*

1. Solvent clean with Grease and Wax Remover WS1018 or Low VOC Surface Cleaner WS1019 and wipe dry with a clean, dry cloth.
2. Treat bare steel areas with Metal Prep W709.
3. For maximum protection, a premium pretreatment primer is recommended. Follow with Low VOC 2k Waterborne Primer-Sealer WP230/232 or HI-GLO® Primer Sealer W711/712/713.

Prepainted Substrates:

1. Wash surfaces with a mild detergent in hot water. Rinse well and wipe dry with a clean cloth.
2. Solvent clean enamel surfaces Grease and Wax Remover WS1018 or Low VOC Surface Cleaner WS1019. Wipe dry with clean cloth.
3. Grind off paint and remove all rust. Fill as needed using an appropriate body filler. Allow body filler to tack up and shape as needed. Body filler must be cured before coating.
4. Sand repair area and featheredge using 80, 180, 280, and finally 320 grit treated sandpaper on a random orbital sander.
5. Treat bare steel areas with Metal Prep W709.
6. Surface with E-PRIME® Acrylic Primer-Surfacer WP215 or Low VOC 2k Waterborne Primer-Surfacer WP230/234 as needed. Block sand with 180 to 280 grit treated sandpaper.
7. Finish sand repair area with 320 grit treated sandpaper on a random orbital sander.
8. Seal with Low VOC 2k Waterborne Primer-Sealer WP230/232 or HI-GLO® Primer Sealer W711/712/713.
(For the above products refer to the appropriate product label or data page for complete information.)

MIXING

1. Stir or shake WES-THANE™ 3.5 Low VOC Color thoroughly before mixing.
2. Mix 3 parts WES-THANE™ 3.5 Low VOC color with one part of WES-THANE™ 3.5 Hardener W7896. No additional reduction is required. Potlife is 1-2 hours @ 75°F.
4. Stir thoroughly and strain before use.
5. To speed out of dust and tape time, using air dry system only, add 1/4-3/4 oz of WES-THANE™ 3.5 Accelerator W7839 per sprayable gallon of WES-THANE™ 3.5 Color. Loss of gloss may occur if 3/4 ounce per sprayable gallon is exceeded.

To maintain 3.5 lbs/gal VOC Compliance:

If the VOC of WES-THANE 3.5 is:		Add up to the following amounts of W7892 Retarder	OR	Add up to the following amounts of W7839 Accelerator
VOC (less exempt) of Intermix Color	VOC RTS (3 : 1 Mix)	# of ounces to RTS gallon		# of ounces to RTS gallon
3.91 (or less)	3.25	5		3/4
4.01	3.33	3.5		3/4
4.11	3.42	1.5		3/4
4.17	3.48	0.5		3/4
4.18	3.49	0.25		1/4

If the VOC of a color does not allow for a required additive level, OR if combinations of additives are needed, reducer must be removed from the intermix formula at the time of mixing according to the following:

1. For every 1 ounce of W7892 needed, remove 115 grams of WES-THANE Reducer from the intermix formula.
2. For every 1/4 ounce of W7839 needed, remove 25 grams of WES-THANE Reducer from the intermix formula.

APPLICATION

1. For proper results use only the following equipment recommendations. Conversional siphon feed equipment may not yield proper appearance. Check equipment by applying Wes-Thane™ 3.5 Low VOC to a test panel before using.

- **Pressure Feed:** Apply one medium crosscoat for non-metallics. Metallic colors require two medium coats with a 3-5 minute flash-off between coats, followed immediately by a light crosscoat to even out metallic mottling.

<u>Gun</u>	<u>JGA 502</u>	<u>Binks Gold Gun</u>	<u>Binks Model 62</u>	<u>Sharpe</u>
Fluid Tip	FF or FX	63C	63C	.070
Air Cap	797	63PW	63PB	#10
Fluid Delivery	8-14 oz/min	8-14 oz/min	8-14 oz/min	8-14 oz/min
Atomizing air psi	60-70 psi @ gun	60-70 psi @ gun	60-70 psi @ gun	60-70 psi @ gun
Gun Distance	10-12 inches	10-12 inches	10-12 inches	10-12 inches

- **Electrostatic:** Apply one medium coat followed by a second medium coat perpendicular to direction of first coat. The second coat may be applied immediately after the first coat. The sprayable wet resistance of WES-THANE 3.5 mixed at 3:1 is .75 Meg-Ohms.

<u>Gun</u>	<u>Binks Model 85B</u>	<u>Kremlin KMP Conventional</u>	<u>Nordson AN8 Conventional</u>	<u>Graco Pro-3500</u>
Fluid Tip	63B	#15 (.055")	0.060"	1.5 mm
Needle	63AE	—	—	—
Air Cap	PW	KP53	987	033 or 739
Atomizing air psi	35-45 psi @ gun	55-60 psi @ gun	55-60 psi @ gun	50-70 psi @ gun
Fluid Delivery	8-12 oz/min	8-12 oz/min	8-12 oz/min	8-12 oz/min
Fluid Pressure	—	25-30 psi	—	—
Kilovolts	60 KV	85 KV	60-75 KV	65 KV
Gun Distance	10-12 inches	10-12 inches	10-12 inches	10-12 inches

- **HVLP:** Apply one medium crosscoat for non-metallics. Metallic colors require two medium coats with a 3-5 minute flash-off between coats, followed immediately by a light crosscoat to even out metallic mottling.

<u>Gun</u>	<u>Binks Mach 1</u>	<u>DeVilbiss JGHV-530</u>	<u>Mattson</u>	<u>Sharpe PTE</u>	<u>Accuspray</u>
Fluid Tip	92 (.046)	FF (.055)	.040	.046	.036
Air Cap	92P	46	Guide Ring	One cap only	#8 or #9
Fluid Delivery	10-12 oz/min	10-12 oz/min	10-12 oz/min	10-12 psi/pot	10-12 oz/min
	10 psi/pot	8 psi/pot	8-10 oz/min		8 psi/pot
Air Pressure	15 psi/gun	40-50 psi/gun	55-60 psi/gun	60-70 psi/gun	60-70 psi/gun
	8-10 psi/cap	9-10 psi/cap	6-7 psi/cap	6-7 psi/cap	6-7 psi/cap
Gun Distance	6-10"	6-10"	6-10"	6-10"	6-10"

2. Normally two coats of WES-THANE™ 3.5 Low VOC Urethane Enamel are sufficient for complete hiding. If a third coat is required for hiding, allow second coat to flash 20-30 minutes, or until hand slick. Apply third coat wetter than the second coat.

DRYING SCHEDULE

Dry times are based on the recommended dry film thickness of **2.0** mils; thicker films will extend drying times.

- **Air dry times @ 70°F and 50% R.H.:**

Dust free	40-60 mins.
Tack free	6-8 hours
Tape free	Overnight
- **Force dry times** (with infrared/radiant heat add 3-5 ounces of Universal Retarder W7892 per sprayable gallon of WES-THANE 3.5):
 - Light colors of Wes-Thane 3.5 may be force dried at a maximum temperature of 120°F.
 - Dark colors of Wes-Thane 3.5 may be force dried at a maximum temperature of 100°F. Higher temperatures may cause hazing.After force drying, allow vehicle to cool down 10-15 minutes before removing from booth.

RECOATING

1. Recoating of WES-THANE™ 3.5 may take place at any time without a recoat lift problem. If film is allowed to dry for more than 48 hours, scuff sand with 320 grit or finer treated sandpaper before recoating.
2. Decals may be applied after air-drying 72 hours at 75°F. Lower temperatures, heavy film thickness, poor air movement, thick decals, foil-based decals, etc., will extend the 72 hour dry time before decal may be applied. Refer to your local Sales Representative for recommendations.

PRODUCT QUICK REFERENCE CHART

PRODUCT USE

WES-THANE™ 3.5 VOC Acrylic Urethane

- Complies with VOC regulations for a maximum VOC content of 3.5 lbs/gallon (sprayable).
- A high performance, durable, high-gloss urethane.
- Withstands harsh industrial environments and chemicals.
- Ideal as a refinish coating for fleets, trucks, and special vehicles.

SUITABLE SUBSTRATES

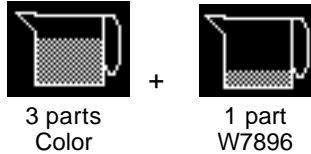
- 2k Waterborne Primer-Surfacer
- E-PRIME Acrylic Primer-Surfacer†
- †Consult local VOC requirements
- 2k Waterborne Primer-Sealer
- HI-GLO Primer-Sealer†

SURFACE PREPARATION

- **Wash** surfaces with a mild detergent in hot water. Rinse well and wipe dry with clean cloth.
- **Solvent clean** with the appropriate solvent cleaner, and wipe dry with a clean cloth.
- **Grind** repair area to remove paint and all rust as needed.
- **Apply body filler** to clean bare metal as needed.
- **Sand** all areas to be refinished and feather edge all broken film areas.
- **Treat** bare metal with an appropriate metal conditioner or etching primer.
- **Surface** with appropriate primer-surfacer. Finish sand with 320 grit sandpaper.
- **Seal** with appropriate sealer.

MIXING

- Stir or shake WES-THANE™ 3.5 color thoroughly before mixing.
- Mix 3 parts WES-THANE™ 3.5 color to 1 part WES-THANE™ 3.5 Hardener W7896.

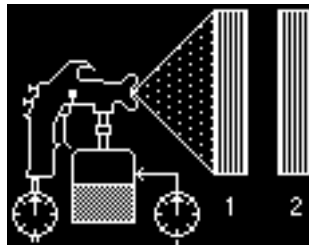


Potlife 1-2 hours @ 75°F.

APPLICATION

Pressure feed*

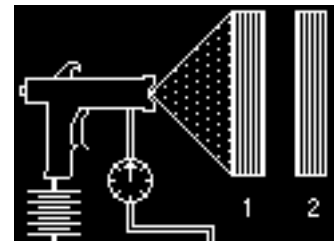
Apply 1 medium cross-coat for solid colors, 2 medium coats for metallic colors with a 3-5 minute flash.



Air pressure: 65-70 psi
Fluid delivery: 16-20 oz./min.

Electrostatic*

Apply 2 medium coats. Flash off is not necessary.



Binks Model 85 B
Kremlin KMP Conventional
Nordson AN8 Conventional

*For complete equipment recommendations see APPLICATION on previous page

RECOAT

- WES-THANE™ 3.5 can be recoated at any time without the fear of lifting.

NOTES

- Decals may be applied after 72 hours. Scuff with nylon scuff pad for proper adhesion.
- Recommended dry film thickness is 2.0-2.5 mils.

PAINT-SAFE® K

- Read all label directions before use.
- Refer to MSDS for specific information.
- Wear a positive air respirator when mixing and applying.
- Wear a NIOSH approved dust particulate mask when sanding.
- Wear safety glasses, coveralls, and rubber gloves when using product.