



SHERWIN-WILLIAMS®
Automotive Finishes

DTM Topcoat
Low VOC Acrylic Polyurethane
Product Data Sheet
E2W34851 White
E2B1738 Black

PRODUCT DESCRIPTION

Direct-To-Metal (DTM) E2B1738 & E2W34851 are two-component urethane systems designed for exterior usage. This coating permits the use of existing application equipment and combines the protection of a primer and topcoat in one package. This DTM will apply directly to properly cleaned and/or pretreated cold-rolled, sandblasted hot rolled steel and aluminum and provide excellent adhesion and corrosion protection, while exhibiting good UV and exterior durability.

TECHNICAL DATA

• Mixing ratio by volume	3:1:1	• Performance after one-week air dry	
E2W34581/E2B1738 : V6V838 : R7K7209		- Impact resistance (80 inch-pounds)	
• Max VOC @ 3:1:1 E2B1738	VOC less exempt 2.75 lbs/gal	Direct	Pass
E2W34851	VOC less exempt 2.53 lbs/gal	Reverse	Pass
• Viscosity (sprayable)	Gardner #2 Zahn Cup (ISO calibrated)	- Flexibility (1/8" conical mandrel)	Pass
	20-24 sec.	- Solvent resistance (10 double rubs)	
• Flash point PMCC (white)	80°F	(MEK/Xylene/Gasoline/Diesel/Oil)	No effect
• Volume Solids (white)	47.8%	- Chemical resistance (24 hr. covered contact)	
• Coverage @ 1 mil dry (white)	766 sq. ft./gallon	Gasoline	No effect
• Recommended min. dry film thickness (2 coats)	2.5-4.0 mils	Motor Oil	No effect
• Gloss @ 60°	75+	Antifreeze	No effect
• Pencil Hardness	HB	- Salt spray resistance -500 hrs*	No effect
		- Humidity resistance - 250 hours*	No effect
		* Over properly treated and primed metal	

SUITABLE SUBSTRATES

- Cold rolled steel
- Hot rolled steel (media blasted)
- Aluminum
- SMC
- FRP

MIXING

1. Stir or shake DTM Topcoat thoroughly before mixing.
2. Mix by volume, **3 parts DTM Topcoat Color with 1 part V6V838 hardener with 1 part R7K7209 reducer**. Stir thoroughly and strain before use. Pot life: 2 Hours @ 70°F.
 - Up to 10% Genesis® Reducer GR1088 or VS100 may be added based on sprayable volume to customize application properties without affecting VOC.
3. Alternative mix ratio is 3 parts DTM Topcoat Color with 1 part V6V838 hardener with 1 part R7K7210 reducer plus 3 ounces of GA1098 per sprayable gallon. *The addition of GA1098 is required for the proper dry times.* This mix will have equal dry times to the standard mix scenario.

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APPLICATION

Overall

1. Adjust air pressure at the gun to 55-65 psi for siphon, gravity or pressure feed (adjust pot pressure to 5-10 psi for 8-15 fluid ounces per minute delivery) or 8-10 psi at the cap for HVLP guns.
2. For Pressure/Siphon feed, apply 2 medium coats at a gun distance of 8-10 inches. Spray to hiding. For HVLP, apply 1 full wet coat with 50% overlap, applying the second coat in a cross-coat method. Recommended dry film thickness is 2.5-4.0 mils.
3. Clean spray gun immediately after use with compliant Gun and Equipment Cleaner.

Repair

1. Repair process must be performed using a two-gun method. Apply DTM Topcoat over the repaired area carrying out the wet edge just beyond the repair.
2. Allow DTM Topcoat to flash per data sheet recommendations. Apply a second coat to achieve proper hiding and blending of the color into the repaired area and lightly feather the outer edge.
3. Immediately after feathering the final coat, melt the feathered edge with a wet-on-wet application using Ure-Blend™ BS10 1K Urethane Blending Solvent.

Buffing Blend Area

- Allow finish to cure.
- If sanding is needed for dirt or smoothing the blend area, use 2000 to 2500 grit wet paper.
- Buff blend area by machine with a quality micro-finishing compound followed by machine glaze. Hand glaze if needed.

Equipment

<u>Gun Type</u>	<u>Nozzle</u>	<u>Air Pressure</u>
Conventional Siphon Feed	1.3-1.5 mm	50-55 psi
Conventional Gravity Feed	1.3-1.5 mm	50-55 psi
Conventional Pressure Feed	0.8-1.1 mm at 8-12 oz/min	50-55 psi
HVLP Gravity Feed	1.3-1.5 mm	10 psi at cap
HVLP Pressure Feed	0.8-1.1 mm at 8-12 oz/min	10 psi at cap
Reduced Pressure Gravity	1.3-1.5 mm	follow gun manufacturer recommendations
Reduced Pressure Pressure	0.8-1.1 mm	follow gun manufacturer recommendations

DRYING SCHEDULE

Dry times are based on the recommended dry film thickness of 2.5 – 4.0 mils; thicker films will extend drying times.

Air dry times @ 75°F and 50% Relative Humidity:

- Dust free	10 minutes
- Tack free	45 minutes
- Tape free	1- 2 hours
- Nib Sand	1 - 2 hours

Force dry times:

<u>Temperature</u>	<u>Bake Time</u>	<u>Handling Time</u>
140°F	40-50 minutes	80-120 minutes
160°F	30-40 minutes	60-80 minutes
180°F	20-30 minutes	45-60 minutes

NOTES

- 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 Sherwin-Williams Representative for recommendations.
- Infra-Red Recommendation: 10 min. on low for flash and 20 min. on high or until firm. Lamp should be no closer than 36 inches.
- May be recoated with itself anytime.

PRODUCT -AT-A-GLANCE

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PRODUCT USE

- Ideal for OEM, Fleet, Truck, Special Vehicle finishing.
- Provides a high gloss, extremely durable, chemical/solvent resistant finish.
- Resists marring, stone chips, harsh environments.

SUITABLE SUBSTRATES

- Cold rolled steel
- Hot rolled steel (media blasted)
- Aluminum
- SMC
- FRP

SURFACE PREPARATION

- **Wash** surfaces with a mild detergent in hot water. Rinse well and wipe dry with a clean cloth.
- **Solvent clean** with Low VOC Surface Cleaner W4K157 and wipe dry with a clean cloth.
- **Sand** all areas to be refinished and featheredge all broken film areas.
- **Solvent clean** with Low VOC Surface Cleaner W4K157 and wipe dry with a clean cloth.

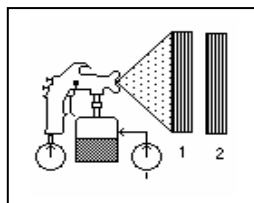
MIXING

- Stir or shake DTM Topcoat Low VOC color thoroughly before mixing.
- Mix by volume 3 parts of DTM Topcoat Low VOC Color with 1 part hardener V6V838 with 1 part reducer R7K7209.
- Pot life: 2 hours



APPLICATION

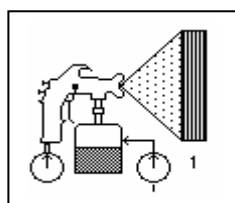
Pressure Feed/Siphon Feed*
Apply 2 medium coats.
Allow each to become hand slick



Air pressure:
50-55 psi
5-10 psi pot pressure

Fluid delivery:
8-12 oz./min.

HVLP*
Apply 1 full wet coat
With 50% overlap.



10 psi
at the cap

Fluid delivery:
8-12 oz/min.

*See APPLICATION on previous page for complete equipment recommendation.

RECOAT

- Decals may be applied after 72 hours. Lower temperatures, heavy film thickness, poor air movement, thick decals, foil based decals, etc., will extend the dry time before the decal may be applied.
- May be recoated at any time with itself. Must be scuffed or sanded after 24 hours.

NOTES

- Recommended dry film thickness is 2.5-4.0 mils.

PERSONAL PROTECTION

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