



**SHERWIN  
WILLIAMS.**

# Chemical Coatings

CC-D27

## POLANE® SP Polyurethane Enamel

White ..... F63WC140  
 Blending Clear ..... F63VL4  
 Black ..... F63BC103  
 Catalyst ..... V66V55

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>
<p>Polane® SP Polyurethane Enamel is a 3.5 VOC, HAPs-free, two-component exterior grade full gloss polyurethane enamel topcoat providing very good exterior durability and resistance properties. It is recommended for use on agriculture, construction OEM equipment, related add-on attachments, trailers, general metal and plastic finishing.</p> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>• 3.5 VOC* as applied</li> <li>• HAPS free</li> <li>• Free of chromate hazards</li> <li>• Free of lead hazards as packaged in compliance with Consumer Product Safety Commission's (CPSC) 16 CFR Chapter II: Subchapter B, part 1303.</li> <li>• Fast dry through and hardness development</li> <li>• Excellent appearance with a "Class A" finish</li> <li>• Improved "out of dust time" and fast cure response</li> <li>• Excellent application characteristics including airless, HVLP and conventional spray applications.</li> <li>• Very good color and gloss retention</li> <li>• Compatible with a wide range of primers, including: E65A4, E65A71, E61AC133, E61AC722, E61A280, E61AC136 and E61AC134.</li> <li>• Excellent physical and chemical properties</li> </ul> <p>*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.</p>	<p><b>Gloss: 20°/60°</b> 80 - 90+ units  <b>Volume Solids:</b> 46-54 ± 1% catalyzed and reduced</p> <p><b>Viscosity:</b>    30-40 seconds #3 Zahn Cup</p> <p><b>Recommended film thickness:</b>    Mils Wet 2.4 - 4.0    Mils Dry 1.2 - 2.0</p> <p><b>Spreading Rate</b> (no application loss)    361-735 sq ft/gal @ 1.5-2.0 mils DFT</p> <p><b>Drying</b> (77°F, 50% RH):    To Touch: 45 minutes    To Handle: 8-10 Hours    Tack Free: 5 Hours    To Recoat: No critical recoat    To Pack: Overnight    Force Dry: 25 minutes at 160°F</p> <p>If faster drying is required, add one ounce of GA1097. Do not exceed a total of 3 ounces accelerator. Do not use V66VB11.</p> <p><b>Flash Point:</b> 80-102°F PMCC</p> <p><b>Mixing Ratio: V66V55</b>    5 parts Part A    1 part Catalyst V66V55    0.7 parts Reducer R6K30</p> <p><b>Mixing Ratio: V66VC232 or V66VC236</b>    4 parts Part A    1 part Catalyst V66VC232 or V66VC236</p> <p><b>Pot Life:</b> 1-2 hours  <b>Package Life:</b> 24 months, unopened</p> <p><b>Air Quality Data:</b>    Non-photochemically reactive Volatile Organic Compounds (VOC) Catalyzed and reduced as above, maximum    3.5 lb/gal, 420 g/L    Hazardous Air Pollutants (HAPS) as packaged, maximum    0.0 lbs per lb of solids</p> <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility.</p>	<p><b>General:</b> Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, any contamination, and surface passivation treatments to ensure optimum adhesion and coating performance properties. Consult Metal Preparation Brochure CC-T1 for additional details.</p> <p><b>Steel or Iron:</b> Remove rust, mill scale, and oxidation products. For best results, treat the surface with a proprietary surface chemical treatment of zinc or iron phosphate to improve corrosion protection.</p> <p><b>Aluminum:</b> Prime with Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G520, or a proprietary chrome phosphate treatment. For good adhesion and optimum coating performance properties use a minimum of a 5-stage chrome phosphate metal treatment, or equivalent.</p> <p><b>Galvanized Steel:</b> Prime with Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G520.</p> <p><b>Plastic:</b> Due to the diverse nature of plastic substrates, a coating or coating system must be tested for acceptable adhesion to the substrate prior to use in production. Reground and recycled plastics along with various fire retardants, flowing agents, mold release agents, and foaming/blowing agents will affect coating adhesion. A filler or primer/barrier coat may be required. Please consult your Sherwin-Williams Chemical Coatings Sales Representative for system recommendations.</p> <p><b>Testing:</b> Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion and compatibility prior to full scale application.</p>

## APPLICATION

### Typical Setups

#### May be applied by:

Conventional Spray  
Airless Spray (some limitations)  
Air Assisted Airless  
Electrostatic Spray  
HVLP

#### Conventional Spray:

Air Pressure ..... 45-60 psi  
Fluid Pressure ..... 10 – 20 psi  
Tip ..... .055  
Reducer ..... MAK or R7K75  
Reduction Rate .. as needed up to 20%

#### Airless Spray:

Pressure ..... 2100 – 2500 psi  
Tip ..... .011 - .013"  
Reducer ..... MAK or R7K75  
Reduction Rate .. as needed up to 20%

#### Air Assisted Airless:

Air Assist Pressure ..... 15-30 psi  
Fluid Pressure ..... 1500 – 2500 psi  
Cap/Tip ..... .011" - .013"  
Reducer ..... MAK or R7K75  
Reduction Rate .. as needed up to 20%

#### Electrostatic Spray:

Reducer for flow ..... MAK or R7K75  
Reduction Rate ..... 20%

#### HVLP:

Air Pressure at the cap ..... <10 psi  
Fluid Pressure ..... 15 – 25 psi  
Tip ..... .052  
Reducer ..... MAK or R7K75  
Reduction Rate as needed up to 20%

#### Cleanup:

Clean tools and equipment immediately after using with Polane reducers, MEK, MIBK or MAK.

Follow manufacturer's safety recommendations when using any solvent.

## SPECIFICATIONS

- Do not use V66VB11 to accelerate cure. Using this accelerator will result in extremely short pot life.
- Do not exceed 3 ounces of GA1097 per sprayable gallon of paint.
- Do not exceed the maximum tint load of 24 ounces per gallon when using Phoenix Colorants in F63VL4 clear.
- Do not exceed the maximum tint load of 12 ounces per gallon when using Phoenix Colorants in F63WC140 white.
- If superior color and gloss retention properties are required, consider Polane G Plus.
- Catalysts V66VC232 and V66VC236 are pre-reduced.

#### Performance Tests

Substrate: Bonderite 1000 P60 steel panels primed with E61AC133 primer.

#### Salt Spray Test

ASTM B117 ..... 500 hours  
Humidity

ASTM D2247, 100°F, 100% RH 500 hours  
Conical Mandrel

ASTM D633 ..... passes 1/8" mandrel  
Impact Resistance, Direct

ASTM D2794 ..... 80 in lb  
Impact Resistance, Reverse

ASTM D2794 ..... 40 in lb  
Pencil Hardness

ASTM D3363 ..... 2H  
Chip resistance ..... Excellent, 7A

Water Immersion ..... 96 hours, no effect

Water spot test ..... 24 hours, no effect

#### Chemical Resistance Test

24 hour covered spot test

Engine Oil ..... no visual effect

Diesel Fuel ..... no visual effect

Unleaded Gasoline ..... no visual effect

Trisodium Phosphate ..... no visual effect

**Note:** Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application which are not known or under our control, The Sherwin-Williams Company cannot make any warranties as to the end result.

## CAUTIONS

### FOR INDUSTRIAL SHOP APPLICATION

Thoroughly review product label and Material Safety Data Sheet (MSDS) for safety and cautions prior to using this product.

A Material Safety Data Sheet is available from your local Sherwin-Williams facility.

Please direct any questions or comments to your local Sherwin-Williams facility.