POLANE® SP Polyurethane Enamel

**DESCRIPTION**

Polane® SP Polyurethane Enamel is a 3.5 lb/gal VOC* two-component exterior grade full gloss polyurethane enamel topcoat providing very good exterior durability and resistance properties. It is recommended for use on agricultural, construction OEM equipment, related add-on attachments, trailers, general metal and plastic finishing.

**Advantages:**
- Excellent appearance with a "Class A" finish
- Excellent physical and chemical properties
- Excellent application characteristics including airless, HVLP and conventional spray applications.
- Improved “out of dust time” and fast cure response
- 3.5 lb/gal VOC as applied
- Very good color and gloss retention
- Fast dry through and hardness development

**Air Quality Data:**
- Non-photochemically reactive
- Volatile Organic Compounds (VOC)
  Theoretical catalyzed and reduced as above, less exempt solvents
  <3.5 lb/gal, 420 g/L
- Hazardous Air Pollutants (HAPS) as packaged, no reportable HAPS

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.paintdocs.com

* VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.

**CHARACTERISTICS**

- **Gloss:**
  - 80 units (20°)
  - 90+ units (60°)
- **Volume Solids:**
  - 46-54 ± 1% catalyzed and reduced
- **Viscosity:**
  - 30-40 seconds #3 Zahn Cup
- **Recommended film thickness:**
  - Mils Wet: 2.4 – 4.0
  - Mils Dry: 1.2 – 2.0
- **Spreading Rate** (no application loss)
  - 361-735 sq ft/gal @ 1.5-2.0 mils DFT
- **Drying (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
- **Flash Point:**
  - 80-102°F Pensky-Martens Closed Cup
- **Mixing Ratio:**
  - V66V55
    - 5 parts Part A
    - 1 part Catalyst V66V55
    - 0.7 parts Reducer R6K30
  - V66VC232 or V66VC236
    - 4 parts Part A
    - 1 part Catalyst V66VC232 or V66VC236
- **Pot Life:**
  - 1-2 hours
- **Package Life:**
  - 36 months, unopened
  - V66V55, V66VC232
  - 12 months, unopened
  - V66VC236 24 months unopened

**SPECIFICATIONS**

**General:** 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.

**Steel or Iron:** 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.

**Aluminum:** Prime with Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G522, 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.

**Galvanized Steel:** Prime with Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G522.

**Plastic:** 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 Sales Representative for system recommendations.
APPLICATION

Typical Setups

May be applied by:
- Conventional Spray
- Airless Spray
- Air Assisted Airless
- Electrostatic Spray
- HVLP

Air-Assisted Airless application is not recommended for Class A finishes. May be acceptable in situations where the mixing has been customized for the specific application conditions and the appearance requirements are less stringent.

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.............................. .052"
- 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... as needed up to 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.

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ADDITIONAL INFORMATION

- 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
- Impact Resistance, Direct
  - ASTM D633............... passes 1/8" mandrel
- Impact Resistance, Reverse
  - ASTM D2794 ..................40 in lb
  - Chip resistance............... Excellent, 7A
- Water spot test .............. 24 hours, no effect
- Water Immersion............... 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

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

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

To obtain the most current version of the Environmental Data Sheet (EDS), Product Data Sheet (PDS), or Safety Data Sheet (SDS) please visit your local Sherwin-Williams facility or www.paintdocs.com.

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

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