



Chemical Coatings

CC-D26

POLANE® G Plus Polyurethane Enamel

Black F63B201
 White F63W200
 Blending Clear F63V202
 Metallic Mixing Clear F63V203

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>
<p>POLANE® G Plus Polyurethane Enamel is a two component coating providing high gloss, excellent exterior durability and resistance properties along with high volume solids and 3.37 VOC compliance*.</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Under 3.37 lbs/gal VOC with Polane HS Plus Catalyst V66V55 • Excellent exterior color and gloss retention with V66V55 catalyst • Excellent exterior physical and chemical performance properties • Excellent appearance over many types of metal and plastic substrates • High solids - high spreading rate • Air dry or force dry curing • Full color range available • Excellent hardness and impact resistance • Excellent mar and abrasion resistance • Apply by conventional, airless, HVLP, electrostatic spray and air-assisted airless • Free of lead and chromate hazards <p>*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.</p>	<p>Gloss: Full, 90+ units</p> <p>Volume Solids: 49-50 ± 2% catalyzed and reduced, may vary by color</p> <p>Viscosity: catalyzed and reduced 18-27 seconds #2 Zahn Cup</p> <p>Recommended film thickness: Mils Wet: 2.5 - 3.0 Mils Dry: 1.25 - 1.5</p> <p>Spreading Rate (no application loss) @ 1.25-1.5 mil dft: 626-768 sq ft/gal</p> <p>Air Drying (1.5 mils dft, 77°F, 50% RH): To Touch: 50-60 minutes To Handle: 7-8 hours Tack Free: 4 hours Force Dry: 20-40 min. at 140-180°F Curing temperature must not exceed the heat distortion temperature of the plastic substrate. Infratherm oven schedule to tack free: (Flash off: 1 minute)</p> <p>Mixing Ratio: 3 part Polane G Plus 1 part Catalyst V66V55 1 part R7K95 Pot Life: 2 hours</p> <p>Accelerated Drying: Add up to 1/2 ounce of Polane Accelerator, V66VB11 per gallon of Polane G Plus. To Touch: 30-60 minutes To Handle: 2-3 hours Tack Free: 1-2 hours To Recoat: 1-1½ hours Force Dry: 30 min. at 140-180°F</p> <p>Mixing Ratio: 3 part Polane G Plus including Accelerator 1 part Catalyst V66V55 1 part R7K95 Pot Life: 1 hour</p> <p>Flash Point: 81°F Package Life: 1 year, unopened</p> <p>Air Quality Data: Non-photochemically reactive Volatile Organic Compounds (VOC) catalyzed and reduced as above, maximum 3.37 lb/gal, 404 g/L</p> <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility.</p>	<p>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.</p> <p>Aluminum, untreated: Prime with Industrial Wash Primer, P60G2, or Kem Aqua Wash Primer, E61G520, followed by Polane Plus Sealer, E65A71 or 2.8 VOC Catalyzed Epoxy Primer, E61A280.</p> <p>Galvanized Steel, untreated: Prime with Industrial Wash Primer, P60G2, or Kem Aqua Wash Primer, E61G520, followed by Polane Plus Sealer, E65A71 or 2.8 VOC Catalyzed Epoxy Primer, E61A280.</p> <p>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 Chemical Coatings Sales Representative for system recommendations.</p> <p>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. For untreated metal: Prime with Industrial Wash Primer, P60G2, or Kem Aqua Wash Primer, E61G520, followed by Polane Plus Sealer, E65A71 or 2.8 VOC Catalyzed Epoxy Primer, E61A280. For best corrosion resistance, prime treated steel with Polane Plus Sealer, E65A71 or 2.8 VOC Catalyzed Epoxy Primer, E61A280.</p> <p>Testing: 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

Note: Maximum total reduction is 25% by volume to maintain 3.5 VOC. Other recommended reducers are:

A blend of 75% R7K84 and 25% R6K30 (MAK).

For improved flow use a blend of 75% R7K95 and 25% R6K30.

MIBK may also be used as a reducer.

Conventional Spray:

Air Pressure 40-50 psi
Fluid Pressure 5-10 psi
Cap/Tip..... .047

Airless Spray:

Pressure 2000-2800 psi
Tip..... .009 - .011"

Electrostatic Spray:

Conductivity is 0.2-0.8 megohms resistance, which is suitable for most hand-held electrostatic spray setups.

HVLP:

Air Pressure 3-5 psi
Fluid Pressure 5-10 psi
Cap/Tip..... .040

Air Assisted Airless:

Air Pressure 10-30 psi
Fluid Pressure 600-900 psi
Cap/Tip009 - .011"

Dipping, brushing or flowcoat application is not recommended.

Cleanup:

Clean tools/equipment immediately after use with Reducer, R7K95 or MAK. Polane reducers, MEK and MIBK may also be used but are not HAPS compliant.

Follow manufacturer's safety recommendations when using any solvent.

Performance Tests

Bonderite 1000 steel panels, F63W200 catalyzed and reduced, 1.5 mils dft, 30 minutes at 180°F, 14 days air cured

Salt Spray Test 300 hours
1/8" rust creepage at scribe
Humidity 100°F, 100% RH 300 hours
Impact Resistance, Direct 80 in lb
Impact Resistance, Reverse 60 in lb
Pencil Hardness H - 2H
Water Immersion 24 hours
Adhesion, Crosshatch Excellent
MEK, 100 double rubs no burnish
Heat Resistance, Dry 250°F
Taber Abrasion.....CS-17 wheel, 1000 g,
1000 cycles <160 mg loss

SPECIFICATIONS

Product Limitations:

- Polane G Plus coatings must be catalyzed with V66V55 for exterior application. Do not vary catalyst ratio. Maintain an exact ratio. The catalyst ratio has been established for optimum hardness, flexibility, gloss, chemical and solvent resistance.
- Polane G Plus coatings are not recommended for use on wood.
- Do not spray hot. Heat shortens potlife. Do not pump catalyzed materials from drums into circulating system. Friction heat developed by pumps and circulation will shorten potlife.
- Protect Polane Enamels, Catalyst and Reducer from moisture as water affects potlife and properties. Store indoors.
- Do not package Polane coated products in airtight plastic bags unless completely cured. Since Polane Enamels continue to cure for several weeks, the buildup of organic solvents and reaction by-products could cause improper cure and adhesion failure in use.
- Do not exceed 2.0 mil dry film with airless or air assisted airless equipment due to sagging tendencies.
- For air-assisted airless applications, solvent blend adjustments may be necessary.

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.

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.