



General Industrial Coatings

CC-D34

Polane® 8910 Polyurethane Enamel

High Gloss Black.....F63B201	Low Gloss Clear.....F63T205	High Gloss Blend Series.....F63GX
High Gloss Jet Black.....F63B202	Low Gloss White.....F63W204	Low Gloss Blend Series.....F63GP
High Gloss Clear.....F63V202	Metallic Mixing Clear.....F63V203	Antimicrobial Blend Series.....F63GM
High Gloss White.....F63W200	Catalyst.....V66V55	Catalyst.....V66V280

DESCRIPTION

POLANE® 8910 Polyurethane Enamel is a two component coating providing a full gloss range with excellent exterior durability and chemical resistance properties along with high volume solids and low VOC*.

POLANE 8910 Antimicrobial Polyurethane Enamel Blends contain an anti-microbial additive which protects the coating surface from microbial growth. Normal cleaning and surface maintenance practices should always be followed.

Advantages:

- Excellent exterior color and gloss retention with V66V55 & V66V280 catalysts
- Very good combination of hardness and impact resistance
- Excellent exterior physical and chemical performance properties
- Excellent appearance over many types of metal and plastic substrates
- Excellent mar and abrasion resistance
- Air dry or force dry
- Available in a broad range of colors
- Formulated to meet 2.8 or 3.5 lbs/gal VOC regulations, depending on catalyst choice
- Ability to be applied as a textured coating
- Apply by conventional, airless, HVLP, electrostatic spray and air-assisted airless

Flash Point: 81-83°F
Pensky-Martens Closed Cup

Package Life (unopened):

Polane 8910	2 years
V66V55	12 months
V66V280	24 months

Air Quality Data:

- Non-photochemically reactive
- Volatile Organic Compounds (VOC):
3.5 lbs/gal, 420 g/L
2.8 lbs/gal, 336 g/L
theoretical catalyzed and reduced

CHARACTERISTICS

60° Gloss: High: 90+
Low: 10

Volume Solids: 50 - 55 ± 2%
catalyzed & reduced, may vary by color

Viscosity: 18-27 secs., #2 Zahn Cup
catalyzed & reduced

Recommended film thickness:
Mils Wet 3.0-4.0
Mils Dry 1.5-2.0

Spreading Rate (at 3.5 VOC):
535 - 590 sq ft/gal @ 1.5 mils DFT
no application loss, may vary by color

Mix Ratio		
3.5 VOC		
Polane 8910	3 parts	-
Polane 8910 + *V66VB11 Accelerator	-	3 parts
V66V55 Catalyst	1 part	1 part
R6K30 Reducer	1 part	1 part
2.8 VOC		
Polane 8910	4 parts	-
Polane 8910 + *V66VB11 Accelerator	-	4 parts
V66V280 Catalyst	1 part	1 part
R6K38 Reducer	1 part	1 part

Drying Performance (2.8 & 3.5 VOC)		
		*Accelerated
Pot Life	2 hours	1 hour
Force Dry (mins) @ 140 - 180° F	20 - 40	30
Air Drying Performance		
To Touch (mins.)	50 - 60	30 - 60
Tack Free (hrs.)	4	1 - 2
To Handle (hrs.)	7 - 8	2 - 3
To Recoat (hrs.)	-	1.0 - 1.5

*Add up to 1/2 ounce of Polane® Accelerator V66VB11 per gallon. Accelerator use may impact gloss.

Curing temperature must not exceed the heat distortion temperature of the plastic substrate.

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

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

Application

Typical Setups

Reduction: To maintain 2.8 or 3.5 lbs/gal VOC, follow the recommended reduction guidelines. For improved flow use a blend of 10% R7K95 and 90% R6K30. MIBK may also be used as a reducer.

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

Conventional Spray:

Air Pressure..... 40 – 50 psi
Fluid Pressure 5 – 10 psi
Cap/Tip..... 0.047 in

Airless Spray:

Pressure 2000 – 2800 psi
Tip 0.009 – 0.011 in

Air Assisted Airless:

Air Assist Pressure 10 – 30 psi
Fluid Pressure 600 – 900 psi
Cap/Tip..... 0.009 – 0.011 in

Electrostatic Spray:

Conductivity is 0.5 – 1.5 megohms resistance, which is suitable for most hand held electrostatic spray setups.

HVLP:

Air Pressure at the cap 3 - 10psi
Fluid Pressure 5 – 10 psi
Cap/Tip..... 0.040 in

Equipment/application guidelines are only guidelines and individual application & process parameters will dictate exact requirements.

Cleanup:

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

Follow manufacturer's safety recommendations when using any solvent.

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.

Aluminum, Untreated: Prime with RoHS Compliant Wash Primer, P60G10, or Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G522, followed by Polane Plus Sealer, E65A71 or 2.8 VOC Catalyzed Epoxy Primer, E61A280.

Galvanized Steel, Untreated: Prime with RoHS Compliant Wash Primer, P60G10, or Industrial Wash Primer, P60G2, or Kem Aqua Wash Primer, E61G522, followed by Polane Plus Sealer, E65A71 or 2.8 VOC Catalyzed Epoxy Primer, E61A280.

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.

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 RoHS Compliant Wash Primer, P60G10, or Industrial Wash Primer, P60G2, or Kem Aqua Wash Primer, E61G522, 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.

Testing: The information, data, and recommendations set forth in this Product Data Sheet are based upon test results believed to be reliable. However, due to the wide variety of substrates, substrate properties, surface preparation methods, equipment and tools, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

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ADDITIONAL INFORMATION

- Polane 8910 coatings must be catalyzed with V66V55 or V66V280 for exterior application. **Do not vary catalyst ratio.** The catalyst ratio has been established for optimum hardness, flexibility, gloss, chemical and solvent resistance.
- 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 the recommended amount of V66VB11 per sprayable gallon of paint. If using more than the recommended amount of accelerator, pot life, recoat time, adhesion, VOC and other properties may all be negatively affected. Coating performance must be thoroughly checked prior to implementing this strategy.
- 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.
- Compatible with Opticolor® Express & Phoenix® colorants. Maximum colorant tint load is 24 ounces per gallon in F63V202 and F63T205 and 8 ounces per gallon in F63W200 and F63W204.

Performance Tests*

Substrate: 24 gauge Bonderite® 1000 P99X cold rolled steel panels
Coating: F63W200:V66V55, catalyzed 3:1 Reduced
Dry Film Thickness: 1.5 mils
Force Dry: 30 mins. at 180°F
Cure: 14 days, Air Dry

Salt Spray Test 300 hours
ASTM B117 1/8" rust creepage at scribe
Humidity 1000 hours
ASTM D2247, 100°F, 100% RH
Impact Resistance, Direct 80 in lb
ASTM D2794
Impact Resistance, Reverse 40 in lb
ASTM D2794
Pencil Hardness H – 2H
ASTM D3363
Water Immersion 24 hours
ASTM D870
Adhesion, Crosshatch Excellent
ASTM D3359
MEK, 100 double rubs No Burnish
ASTM D5402
Heat Resistance, Dry 250° F
ASTM D2485
Taber Abrasion, < 160 mg
ASTM D4060 CS 17 wheel, 1000 g, 1000 cycles

*Performance test results may vary depending on dry film thickness, substrate tested and post-cure duration.

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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