General Industrial Coatings

CC-D6

POLANE® HS Enamel

Black	F63B50	Gloss Blending White	F63W56	Catalyst (interior)	V66V27
Gloss Blending Clear	F63V59	Flatting Base	F63T2	Catalyst (exterior)	V66V29
				Custom Blend Series	F63HX

DESCRIPTION

POLANE® HS Enamel is a two component polyurethane coating providing high volume solids at the gun.

Advantages:

- Very good interior and exterior physical and chemical performance
- Ideal coating for Machine Tool Industry with resistance to most lubricants and cutting oils
- High spreading rate due to higher solids
- Air dry or force dry
- Available in a broad range of colors and gloss levels
- Excellent hardness and impact resistance
- Excellent adhesion, mar resistance, and abrasion resistance
- Apply by conventional, airless, HVLP or electrostatic spray

Air Quality Data: (Theoretical)
Non-photochemically reactive
Volatile Organic Compounds (VOC)*, as packaged, maximum, less exempts:
2.96 lbs/gal, 355 g/L

Catalyzed and reduced:

With V66V27:	4.05 lbs/gal, 485 g/L
With V66V29:	3.61 lbs/gal, 433 g/L

*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.

CHARACTERISTICS

60° High Gloss: 90+

Volume Solids (varies by color)**:** 44-51%
Catalyzed and reduced

Viscosity: 18-21 secs., #2 Zahn Cup
Catalyzed and reduced

Recommended Film Thickness:

Mils Wet	2.5-3.5
Mils Dry	1.25-1.5

Spreading Rate (no application loss)**:**
470-654 ft.^{2}/gal. at 1.25-1.5 mils DFT

Drying: 77° F, 45% RH

Catalyzed with V66V27

To Touch	20 minutes
To Handle	8 hours
Tack Free	30 minutes
To Recoat	No critical recoat time
Force Dry	30 minutes at 180° F

Catalyzed with V66V29

To Touch	60-90 minutes
To Handle	10-12 hours
Tack Free	8 hours
To Recoat	5-6 hours

Substrate Disclaimer: Curing of coating at temperatures higher than the heat distortion parameters of the substrate may cause substrate issues.

Accelerated Drying (effective with the catalyst V66V29 only)**:**
Add up to 4 oz. of V66VB11 per gallon of uncatalyzed Polane Enamel. Mix well. Then catalyze and reduce. Working potlife is reduced to 1-1½ hours.

To Touch	30-60 minutes
To Handle	2-3 hours
Tack Free	1-2 hours
To Recoat	1-1½ hours

Mixing Ratio (by volume)**:**

Polane HS	2 Parts
Catalyst (V66V27 or V66V29)	1 Part
Reducer R7K95	0.75 Parts

Lower gloss blends require a catalyst ratio of 3:1

Potlife: 2-3 hours

Flash Point (Pensky Martens Closed Cup)**:**
25-40° F

Package Life:

F63V59 and V66V29	24 mos., unopened
V66V27	12 mos., unopened

SPECIFICATIONS

General: All substrates should be free of mold release, oil, grease, dirt, fingerprints, drawing compounds, surface passivation treatments and any other contaminants to ensure optimum adhesion and coating performance. Consult Metal Preparation brochure CC-T1 for additional details.

Aluminum (untreated): Prime with RoHS Compliant Wash Primer, P60G10, Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G522.

Galvanized Steel (untreated): Prime with RoHS Compliant Wash Primer, P60G10, Industrial Wash Primer, P60G2, or Kem Aqua Wash Primer, E61G522.

Steel: Remove rust, mill scale, and oxidation products. For best results in corrosion protection, treat the surface with a proprietary surface chemical treatment of zinc or iron phosphate. On untreated steel use RoHS Compliant Wash Primer, P60G10, or Industrial Wash Primer, P60G2, followed with Polane Primer/Sealer, E65A4 or 2.8 VOC Catalyzed Epoxy Primer, E61A280. On treated steel, prime with Polane Primer/Sealer, E65A4 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.

Wood (interior only)**:** Must be clean, dry, and finish sanded. Seal with a full coat of Polane SprayFil.

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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APPLICATION

Typical Setups

Conventional Spray:

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

Airless Spray:

Fluid Pressure	2,000-2,800 psi
Tip	0.009-0.011 in.

Air Assisted Airless Spray:

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

HVLP Spray:

Air Pressure	3-5 psi
Fluid Pressure	5-10 psi
Tip	0.040 in.

Dip, brush or flow coat application is not recommended.

Cleanup: Clean tools and equipment immediately after use with Reducer, R7K95 or R6K30 (MAK). Polane reducers, R6K10 (MEK) and MIBK may also be used but are not HAPS compliant.

Follow manufacturer's safety recommendations when using any solvent.

Gloss Adjustments:
Gloss can be lowered by intermixing with Polane Flatting Base, F63T2.

Mixing Ratio	Parts			
Polane Enamel	2	2	1½	1
Flatting Base	0	1	1½	2
Catalyst	1	1	1	1
Gloss at 60° approximately	Full	60-75	40-50	20-30

ADDITIONAL INFORMATION

1. Polane Catalyst, V66V27, interior, or V66V29, exterior, must be used to achieve proper performance. **Do not vary catalyst ratios.** They have been established to provide optimum hardness, flexibility, gloss, and chemical resistance.
2. Use catalyst V66V27 for interior use. V66V27 will lead to early chalking and gloss loss on exterior exposures. Using V66V29 for exterior use will provide very good durability but will increase the dry time of the product.
3. Heat shortens pot life. Do not spray hot. Do not pump catalyzed material into circulating systems. Friction heat developed by pumps and circulation will shorten pot life.
4. Protect from moisture, water affects pot life and product properties. Store indoors.
5. Do not package Polane coated products in airtight plastic bags unless completely cured. Polane continues to cure for several weeks, the buildup of organic solvents and reaction byproducts could cause improper cure and adhesion failure in use.
6. Do not apply to wood for exterior use.
7. Do not blend with any other polyurethane quality. No other catalyst, colorants, or reducers are recommended because foreign materials, such as alcohols and glycols, destroy performance properties. Do not use lacquer thinners or alcohol-containing solvents.
8. Blend with GIS and Phoenix® colorants only. Maximum colorant tint load is 32 ounces per gallon in F63V59 and 12 ounces per gallon in F63B50 & F63W56.

Performance Tests*

Substrate:	Bonderite® 1000 (P60) 20 gauge panels, F63W56, Catalyzed 2:1 with V66V27, reduced 33% with R7K94
Salt Spray Test	250 hours 1/8" rust at scribe
Humidity (100% RH, 100° F)	250 hours
Pencil Hardness	3H
Water Immersion	24 hours

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

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review the 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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