CC-D6

POLANE® HS Enamel

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

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
- No reportable VHAPS
- Free of lead hazards as packaged in compliance with Consumer Product Safety Commission's (CPSC) 16 CFR Chapter II: Subchapter B, part 1303.

CHARACTERISTICS

Gloss: Full
Volume Solids: 44-51%
catalyzed and reduced, varies by color
Viscosity:
18-21 seconds #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 sq ft/gal @ 1.25-1.5 mil DFT
Drying (77°F, 45% RH):
Catalyzed with V66V27
To Touch: 20 minutes
Handle: 8 hours
Tack Free: 30 minutes
To Recoat: no critical recoat
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
Do not exceed the heat distortion temperature of the substrate.
Accelerated Drying (effective with catalyst V66V29 only): Add up to 4 oz. of V66VB11 per gallon of uncatalyzed Polane Enamel. Mix well. Then catalyze and reduce. Working pot life is reduced to 1-1½ hours.
To Touch: 30-60 minutes
To Handle: 2-3 hours
Tack Free: 1-2 hours
Recoat: 1-1½ hours
Flash Point: 25-40°F PMCC
Mixing Ratio:
2 parts Polane® HS
1 part Catalyst V66V27 or V66V29
.75 parts Reducer R7K95
Lower gloss blends require a catalyst ratio of 3:1
Pot Life: 2-3 hours
Package Life: 3 years, unopened
Air Quality Data: (Theoretical)
Non-photochemically reactive
Volatile Organic Compounds (VOC)
as packaged, maximum
2.96 lb/gal, 355 g/L
Catalyzed and reduced as above:
With V66V27: 4.05 lb/gal, 485 g/L
With V66V29: 3.61 lb/gal, 433 g/L
No Reportable VHAPS
An Environmental Data Sheet is available from your local Sherwin-Williams facility.

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, Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G520.
Galvanized Steel (untreated): Prime with RoHS Compliant Wash Primer, P60G10, Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G520.
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 Catalyzed Epoxy Primer, E61RC22. On treated steel, prime with Polane Primer/Sealer, E65A4 or Catalyzed Epoxy Primer, E61RC22.
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: Due to the wide variety of substrates, surface preparation methods, 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..... .047
Airless Spray:
Pressure .....2000-2800 psi
Tip..... .009 - .011"
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/Tip..... .009 - .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.

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

SPECIFICATIONS

Product Limitations:
- Polane Catalyst, V66V27, interior, or V66V29, exterior, must be used to achieve proper performance. Do not vary catalyst ratios which have been established to provide optimum hardness, flexibility, gloss, and chemical resistance.
- 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.
- 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.
- Protect from moisture, water affects pot life and product properties. Store indoors.
- Do not package Polane coated products in air tight plastic bags unless completely cured. Polane continues 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 apply to wood for exterior use.
- 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.
- Blend with Phoenix® Colorants only.
- Gloss levels may be adjusted by using Polane HS Flatting Base, F63T2.

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

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.