

# General Industrial Coatings

CC-D5

# **POLANE® T Polyurethane Enamel**

Profile Gray	F63A33	Flatting Base	F63T1	Clear Tint Base	F63F10C
Carbide Black	F63B12	Blending White	F63W9	Custom Blend Series	F63TX
Blending Clear	F63F10	Linear White	F63W12	Custom Tint Series	F63TN
Catalyst (interior)	V66V27	Catalyst (exterior)	V66V29		

# **DESCRIPTION**

**POLANE®** T Polyurethane Enamel is a two component, low gloss coating providing superior appearance and durability. Polane T can be used as a smooth or textured finish. Its textured appearance camouflages imperfections left by production operations such as grinding marks, welding seams, and molding.

### Advantages:

- Excellent appearance over many types of substrates-metal, plastics, and wood
- Air dry or force dry
- Excellent chemical and water resistance
- Excellent adhesion, mar, and abrasion resistance
- Excellent hardness and impact resistance
- Widely used for coating business machines and computers because of resistance to stains, chemicals, and abrasion and for long-term durability
- Texturing minimizes surface irregularities and provides a three dimensional appearance
- Available in a broad range of colors
- Can be used on structural plastics that cannot tolerate high baking temperatures

## Air Quality Data:

- · Non-photochemically reactive
- Volatile Organic Compounds (VOC)\* as packaged, maximum, less exempts
   5.60 lbs/gal, 671 g/L

Catalyzed and reduced as above,

maximum, 5.82 lbs/gal, 697 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 <a href="https://www.PaintDocs.com">www.PaintDocs.com</a>.

# **CHARACTERISTICS**

## Gloss (60°, as a smooth coat):

Blending Bases 20-25 F63C10C (Clear Tint Base) 20-25

**Volume Solids:** 30-36 ± 2 % Catalyzed and reduced, varies by color

Viscosity:

As packaged 50-80, Krebs Units (varies by color)
Catalyzed & reduced 20-25 secs.
#2 Zahn Cup

### **Recommended Film Thickness:**

Mils Wet 3.0-4.0 Mils Dry 1.0-1.25

Spreading Rate (no application loss): 384-576 ft.<sup>2</sup>/gal. at 1.0-1.25 mils DFT

Cure:

Air Dry or

Force Dry 30 mins. at 140-180° F

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

**Drying:** 1.0 mil DFT, 77° F, 50% RH

Catalyzed with V66V27

To Touch
To Handle
To Pack
To Recoat
Spatter or texture coat can be applied

immediately after flash off of smooth coat. After 7 days, scuff sand to ensure adhesion.

### Mixing Ratio (by volume):

Polane T 6 Parts Catalyst V66V27 or V66V29 1 Part Reduce 33% for smooth coat. Reduce as needed for texture coat with Polane Reducer R7K69 or R7K84.

Potlife: 6-8 hours

Flash Point: (Pensky Martens Closed Cup): 41-55° F

Package Life: 3 years unopened V66V27 12 months unopened V66V29 24 months 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:** If untreated, prime with Indus- trial Wash Primer, P60G2, or RoHS Com- pliant Wash Primer, P60G10.

**Galvanized Steel:** If untreated, prime with Industrial Wash Primer, P60G2, or RoHS Compliant Wash Primer, P60G10.

**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 steel, prime with Industrial Wash Primer, P60G2, or RoHS Compliant Wash Primer, P60G10. For a smoother finish, follow with Polane Primer/Sealer, E65A4. For the best corrosion protection, prime with 2.8 VOC Catalyzed Epoxy Primer, E61A280. For treated steel, to improve performance, prime with Polane Primer/Sealer, E65A4.

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, 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, 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.

# **APPLICATION**

Typical Setups

**Reduction:** Reduce 33% for smooth coat or as need for texture coat with Polane Reducer R7K69 or R7K84. Polane Reducer R7K69 is photochemically reactive, R7K84 is non-photochemically reactive. Polane Retarder R7K216 may be used for better flow

**Texture:** Allow 5-10 minutes flash off of the smooth coat before applying the texture coat. The texture may be varied by adjusting the atomizing and fluid pressures until the desired texture size is obtained. Lower atomizing pressures give a larger texture pattern. Higher atomizing pressure reduces the texture size.

# Conventional Spray pressure feed, smooth or textured coat:

Air Pressure, smooth	45-55 psi
Air Pressure, texture	10-30 psi
Fluid Pressure	8-10 psi
Tip	0.055-0.070 in.

# Conventional Spray suction feed, smooth coat only:

Air Pressure 45-55 psi Tip 0.055-0.070 in.

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

#### Cleanup:

Clean tools/equipment immediately after use with Polane Reducer.

### **Performance Tests\***

Substrate: Bonderite® 1000 steel panels 1.0 mil dry, using V66V27 catalyst Cure: 30 Days, Air Dry

Salt Spray 200 hours ASTM B117 1/8" rust creep on scribe Humidity (100% RH,100° F) 200 hours Conical Mandrel, 1/8" **Pass** 100 in lbs Impact Resistance, Direct Impact Resistance, Indirect 80 in lbs Pencil Hardness H to 2H Crosshatch Adhesion 5B ASTM D-3359 Method B **Taber Adhesion** 100 mg CS 17 wheel, 1000 g, 1000 cycles 100 hours Water Immersion Lacquer thinner, acetone, MEK, gasoline, xylene 20 double rubs

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

Follow manufacturer's safety recommendations when using any solvent.

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## ADDITIONAL INFORMATION

- Polane Catalyst V66V27 (interior) or V66V29 (exterior) must be used to achieve proper performance. Do not vary catalyst ratio which has been established to provide optimum hardness, flexibility, gloss, and chemical resistance.
- 2. Use catalyst V66V27 for interior use.
  3. V66V27 will lead to early chalking and gloss loss on exterior exposures. Use V66V29 for exterior use. Polane T catalyzed with V66V29 is not intended for long term exterior exposures, extended exposure to strong sun will lead to chalking, gloss loss, and color fading.
- 4. For applications involving V66V29 catalyst, V66VB11 accelerator may be used to speed up the dry time. Up to 2 ounces of V66VB11 per gallon of the paint component side is recommended.
- 5. Gloss will be slightly higher when catalyzed with Polane Catalyst V66V29.
- 6. 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 potlife.
- Protect from moisture, water affects pot life and product properties. Store indoors
- 8. 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 by-products could cause improper cure and adhesion failure in use.
- 9. Do not apply to wood for exterior use.
- 10. Do not blend with any polyurethane quality except Polane B or T. 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 alcoholcontaining solvents.
- 11. Gloss levels may be adjusted by using Polane Flatting Base F63T1.
- 12. Do not blend with any colorants other than Opticolor® Express, Phoenix, Color Express & GIS colorants. Maximum colorant tint load is listed in the table below:

	F63F10	F63W9
Opticolor Express	24 oz/gal	4 oz/gal
Phoenix	21 oz/gal	4 oz/gal
Color Express	24 oz/gal	4 oz/gal
GIS	21 oz/gal	4 oz/gal

# **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 <a href="www.PaintDocs.Com">www.PaintDocs.Com</a>.

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

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