Chemical Coatings

SHERWIN WILLIAMS.

CC-D5

POLANE® T Polyurethane Enamel

Profile Gray	F63A33
Nitro Blue	F63L17
Instrument Tan	F63H13
Blending Clear	F63F10
Catalyst (exterior)	V66V29

Carbide Black Fe	63B12
Precision Tan Fe	63H12
Linear White Fe	63W12
Blending White Fe	63W9
Catalyst (interior) V	66V27

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 3 dimensional appearance
- Full color range available through intermixing
- Lower glosses are available by using Polane Flattening Paste, F63T1
- Compatible with VIC[™] Process for accelerated dry times
- Can be used on structural plastics that cannot tolerate high baking temperatures
- Free of lead and chromate hazards

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Gloss:	Low (20-25 units at 60
	degrees) as a smooth
	coat
Volume Solids:	30-36%
catalyzed and re	educed, varies by color
Viscosity:	
30-35 seconds	#4 Zahn Cup
Recommended fi	Im thickness:
Mils Wet	4.5
Mils Dry	1.0-1.25
Spreading Rate (r	no application loss)
@ 1.0-1.25 mil o	dft: 384-576 sq ft/gal
Drying (1.0 mils d	ft, 77°F, 50% RH):
catalyzed with V66	V27
To Touch:	20 minutes
To Handle:	60 minutes
To Pack	Overnight
To Recoat:	no critical recoat time
Force Dry:	30 minutes at
	140-180°F
Do not exceed the	heat distortion tempera-
ture of the substrat	te.
Spatter or texture	coat can be applied im-
mediately after flas	sh off of smooth coat. Af-
ter 7 days, scuff sa	Ind to ensure adhesion.
Mixing Ratio:	
6 parts	Polane T
4	Catal at 1/001/07 an

0 parts		
1 part	Catalyst V6	6V27 or
	V66V29	
Reduce 33% f	or smooth coat.	Reduce as
needed for text	ure coat with Polar	ne Reducer
R7K69 or R7K		

Pot Life:	6-8 hours
Flash Point:	37-65°F Pensky-
	Martens Closed Cup
Package Life	3 years unopened

Air Quality Data:

Non-photochemically reactive Volatile Organic Compounds (VOC) as packaged, maximum

5.5 lb/gal, 660 g/L

catalyzed and reduced as above, maximum 5.7 lb/gal, 684 g/L

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: Prime with Industrial Wash Primer, P60G2.

Galvanized Steel: Prime with Industrial Wash Primer, P60G2.

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, for a smoother finish, follow with Polane Primer/Sealer, E65A4. For the best corrosion protection, prime with Catalyzed Epoxy Primer, E61RC22.

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, 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.

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 and compatibility 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.

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:

Gun	DeVilbiss MBC
Air Pressure, smooth.	40-50 psi
Air pressure, texture	25-30 psi
Fluid Pressure	8-10 psi
Cap/Tip	

Conventional Spray suction feed, smooth coat only:

Gun	DeVilbiss MBC
Air Pressure	40-50 psi
Cap/Tip	

Cleanup:

Clean tools/equipment immediately after use with Polane Reducer. Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

- 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.
- Use catalyst V66V27 for interior use. 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.
- 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.
- 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 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 alcohol-containing solvents.

Performance Tests

Bonderite 1000 steel panels, 1.0 mils dry, 30
days air cure, using V66V27
Salt Spray Test 200 hours
1/8" rust creep on scribe
Humidity, 100% RH, 100°F 200 hours
Conical Mandrel passes 1/8" mandrel
Impact Resistance, Direct 100 in lb
Impact Resistance, Reverse
Pencil Hardness H to 2H
Crosshatch Adhesion, ASTM D-3359,
Method B 5B
Taber Abrasion,
CS 17 wheel, 1000 g, 1000 cycles . 100 mg
Water Immersion 100 hours
Lacquer thinner, acetone, MEK, gasoline,
xylene 20 double rubs
Chemical Resistance
Lubricating & Cutting Oils Excellent
Hydraulic Fluids Excellent

CAUTIONS

SEE CONTENTS STATEMENT ON LABEL. Contents are FLAMMABLE. Vapors may cause flash fires. Keep away from heat, sparks, and open flame. During use and until all vapors are gone: Keep area ventilated - Do not smoke -Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

VAPOR HARMFUL. Use only with adequate ventilation. This product must be used with an appropriate catalyst. Follow the respirator requirement and instructions on the catalyst.

Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

FIRST AID: If INHALED: If affected, remove from exposure. Restore breathing, Keep warm and quiet. If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing. Launder before re-use. If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention. If SWAL-LOWED: Call Poison Control Center, hospital emergency room, or physician immediately.

SPILL AND WASTE: Remove all sources of ignition. Ventilate and remove with inert absorbent. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.

Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

FOR INDUSTRIAL USE ONLY.

SEE MATERIAL SAFETY DATA SHEET.24330-061404.

Catalyst CONTAINS ISOCYANATES. People who have chronic (long-term) lung or breathing problems or have had a reaction to isocyanates, must not be in the area where this product is being applied. Where overspray is present, a positive pressure air-supplied respirator should be worn. If unavailable, a properly fitted organic vapor/particulate respirator may be effective. Consult catalyst MSDS and product label for complete handling instructions.

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.