General Industrial Coatings

CC-D38

Polane® Solar Reflective Polyurethane Enamel

Bronze	F63BL5	B/S Green	F63GL7	White	F63WC134
Black	F63BL6	Blue	F63LL4	G/S Yellow	F63YL5
Jet Black	F63BL32	Dark Brown	F63NL4	R/S Yellow	F63YL6
45 TSR Black	F63BL40	R/S Brown	F63NL5	Custom Blend Series	F63SR
Y/S Green	F63GL6	Red	F63RL8	Catalyst	V66V55

DESCRIPTION

Polane® Solar Reflective Polyurethane Enamel is a two-component, heat reflective coating for exterior use on aluminum, composites, and heat sensitive substrates. Typical heat sensitive substrates include fiberglass and cPVC with heat distortion temperatures < 200° F.

Advantages:

- May be air dried or force dried
- Formulated to meet 3.5 lbs/gal VOC, less exempts, when catalyzed & reduced
- May reduce heat buildup due to solar radiation
- Excellent color and gloss retention
- Passes AAMA 623, 624 & 2604 specifications
- Mar, abrasion, and chemical resistant
- Formulated to be non-HAP

Polane Solar Reflective is not recommended for use on composite substrates with distortion temperatures < 200° F.

* 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

(may vary by color)

60° Gloss: 30-40

Volume Solids: 54.8 ± 2 %
Catalyzed & reduced

Weight Solids: 69.4 ± 1 %
Catalyzed & reduced

Viscosity: 15-20 secs., #3 Zahn Cup at 77° F

Recommended Film Thickness:

Mils Wet	3.3-4.0
Mils Dry	1.8-2.2

Drying: (2.0 mils DFT @ 77° F, 50% RH)

To Touch	30 minutes
Tack Free	1 hour
To Handle	2 hours
To Recoat w/ Itself	90 minutes

Cure:
Air Dry or
Force Dry 20 mins. flash, 40 mins. at 140° F

Do not exceed the heat distortion temperature of the substrate.

Flash Point: 80° F
(Pensky Martens Closed Cup)

Mixing Ratio (by volume)**:**

Polane SR (Part A)	3 Parts
V66V55 (Part B)	1 Part
R6K18 (Reducer)	0.5 Part

Potlife: 30 minutes

Package Life: 1 year, unopened

Air Quality Data (may vary by color)**:**
Non-photochemically Reactive
Volatile Organic Compounds (VOC)
As packaged, maximum
3.18 lb/gal, 381 g/L
Reduced and catalyzed
3.5 lb/gal, 420 g/L
Hazardous Air Pollutants (HAPS)
< 0.8 lbs per lb of solids

SPECIFICATIONS

Aluminum: A minimum of a 5-stage chrome phosphate metal pretreatment, or equivalent, is required for good adhesion and optimum coating performance properties. Also, primer, E61G522 is required.

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.

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

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

Conventional Spray:

Air Pressure	20-40 psi
Fluid Pressure	5-20 psi
Tip	as required
Reducer	ready to spray as catalyzed

Airless Spray:

Fluid Pressure	1,500 psi
Tip	as required
Reducer	ready to spray as catalyzed

Air Assisted Airless Spray:

Air Assist Pressure	10-20 psi
Fluid Pressure	100-250 psi
Tip	as required
Reducer	contact S-W representative

Electrostatic Spray:

Reducer For Polarity	line specific
Reducer	contact S-W representative

HVLP Spray:

Gun	Binks Mach 1
Air Pressure	10-40 psi at cap
Fluid Pressure	5-10 psi
Tip	as required
Reducer	ready to spray as catalyzed

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

Cleanup: Clean tools/equipment immediately after use with R6K10 (MEK), or any or other such solvent.

Follow manufacturer's safety recommendations when using any solvent.

ADDITIONAL INFORMATION

1. This product must be properly catalyzed before using. **DO NOT VARY CATALYST RATIO.** The catalyst ratio has been established for optimum hardness, flexibility, gloss, and chemical & solvent resistance.
2. 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.
3. **All colors for heat sensitive substrates (cPVC, etc.) must be submitted to the Building Products Lab for TSR and HBU testing before the product is used in customer production environments.** Contact Building Products Lab or Building Products Marketing for further details.
4. F63BL32 and F63BL40 use high performance pigments to help meet specific heat build-up and total solar reflectance requirements. These monos yield higher TSR values compared to F63BL5 and F63BL6.
5. IR ovens of any type are not recommended. Use convection and forced air ovens only.
6. These products reflect IR energy and cannot be blended with other polyurethane systems.

COLORANTS

7. Blending of these monochromatic bases is used to create custom colors.
8. Phoenix colorants are not used to tint this product line. Phoenix colorants will affect infrared reflective character of coating.
9. Opticolor tints only may be added, up to a maximum of 2 oz/gallon.

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.

Note:
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