



## Product Finishes

# PermaSwade® 9401 Silk

SILK.....F63TC9  
CATALYST.....V66V55  
CUSTOM BLEND.....F63ZS

### PRODUCT DESCRIPTION

**PermaSwade® 9401 Silk** is a two component urethane technology designed to give a silk feel to various plastics.

#### Advantages

- Apply using conventional or HVLP spray methods.
- Free of lead and chromate hazards
- Adheres directly to ABS, PC/ABS, B1000
- Excellent mar resistance.
- RoHS Compliant
- Maximum 4 ounces of Phoenix® Black can be used to make colors.
- Can be used as a topcoat over metallic or pigmented Kem Aqua® 600, Polane® G Plus, Polane® T and Acrylic Lacquer EP® without any loss of performance

### CHARACTERISTICS

**Volatile Organic Compounds(VOC)\*** as packaged, less exempts.

4.58 lb/gal, 549 g/L

Catalyzed and Reduced :

4.83 lb/gal, 578 g/L

**Gloss at 60°:** 5 maximum

**Volume Solids:** 37.2 ± 1%

**Weight Solids:** 45.3 ± 1%

**Viscosity:** at 25°C (77°F)

Package 24-30 sec #2 Zahn

Ready to Spray 16-20 sec #2 Zahn

**Recommended Film Thickness:**

Wet: 4.0 – 6.7 mils

Dry: 1.5 – 2.5 mils

**Spreading Rate:** (catalyzed and reduced)

547 sq.ft./gal. @ 1.0 mil DFT

**Flash Point:** 40°F Pensky-

Martens Closed Cup

**Package Life:** 6 months unopened

V66V55 12 months,

Unopened

\*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.

### CHARACTERISTICS ( Cont. )

**Mixing Ratio:** (by volume)

5 parts F63TC9  
1 part V66V55  
2 parts Reducer R7KC386

**Pot Life :** 1 Hour

**Drying:** ( 1.0 mils, 77°F, 50% R/H )

To Touch 1 Hour  
To Handle 3-4 Hours  
To Pack Overnight

**Force Dry:**

Flash off time 5 minutes  
30 minutes at 140-180°F

Do not exceed the heat distortion temperature of the substrate.

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at [www.paintdocs.com](http://www.paintdocs.com)

### 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.

**Plastics:** 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 Product Finishes Sales Representative for system recommendations.

**Metal:** Consult Metal Preparation Brochure CC-T1 for additional details.

**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.

### APPLICATION

Typical Setups

**May be applied by:**

Conventional Spray  
HVLP

**Conventional Spray:**

Air Pressure ..... 45-55 psi  
Fluid Pressure..... 10-15 psi  
Tip..... 0.055-0.070

**HVLP:**

Air Pressure at the cap ..... 10 psi max  
Fluid Pressure..... 6-10 psi  
Tip..... 0.055-0.070

**Cleanup:**

Clean tools/equipment immediately after use with R7KC386 reducer, MEK, or MIBK, or n-butyl acetate.

## SPECIFICATIONS

### Product Limitations:

- Short pot life. Plural component equipment recommended
- Protect from moisture. Water affects pot life and product properties. Store indoors
- At least 1.5 mils is needed to obtain sufficient "feel"
- 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
- Do not blend with any polyurethane quality. No other catalysts, 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.
- Phoenix® Black is the only pigment allowed. Do not exceed 4 ounces per gallon.

### PERFORMANCE TESTING

#### Adhesion to substrate:

ABS	Excellent
PC-ABS	Excellent
CRS	Excellent
B1000 P99X	Excellent

#### Linear Abrasion – CS-17

10 cycles, 1000 gram	No visible scratch
50 cycles, 1000 gram	Moderate scratch
100 cycles, 1000 gram	Moderate scratches
50 Double MEK Rubs	Pass
50 Double IPA Rubs	Pass

### Chemical Resistance

#### (72 hr uncovered spot test over ABS)

Dish Soap	Excellent
Mustard	Stain
Fantastik®	Excellent
Cola	Excellent
IPA	Excellent
Extra Virgin Olive Oil	Excellent
Vaseline® Hand Lotion	Excellent
Rouge	Good
Lip Polish	Excellent
Hair Gel	Excellent
Cucina® Hand Cream	Excellent
Perspirant	Excellent
Ketchup	Excellent
Mayonaise	Excellent
Formula 409®	Good
Windex®	Excellent
Acetone	Good
Lipids	Good
Purell® Hand Sanitizer	Excellent

### Chemical Resistance (cont) (72 hr uncovered spot test over ABS)

Coffee	Good
LED/LCD Cleaner	Good
Clorox® Wipe	Excellent
Banana Boat®	Fail
Oleic Acid	Fail

### Chemical Resistance

#### (1 hour covered spot test over ABS)

Lipstck	Excellent
Coffee	Excellent
Mustard	Stain
Water Ink	Excellent
Wax Pencil	Excellent
Red Wine	Stain
Cola	Excellent
Coppertone®	Failure
Nivea® Hand Lotion	Excellent
Formula 409®	Excellent
Ammonia (10%)	Excellent

### Environmental Testing

#### Thermal Cycling:

#### High and low test extremes

High 66°C, 75% RH(72hrs)

Low 25°C, 50% RH

No Effect

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## CAUTIONS

### FOR INDUSTRIAL SHOP APPLICATION ONLY

**Thoroughly review 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](http://www.paintdocs.com).

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

## CAUTIONS ( Cont. )

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.

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