

# Technical Product Data



## **PC6 Series** **Waterborne Polyurethane Topcoat**

PRECISION COATINGS

### DESCRIPTION

Single component waterborne polyurethane dispersion  
Interior and exterior surfaces  
Field and shop application  
Soap & Water Cleanup  
Very Low Odor - Low VOC  
LEED NC 2009 compliant

Gloss, semi-gloss, satin, eggshell, matte  
Metallic, iridescent (pearl), solid color & clear  
Excellent adhesion and chemical & abrasion resistance  
Superior weathering and durability  
No Isocyanates

### TECHNICAL DATA

% SOLIDS by volume	40%
COATING VOC (as packaged)	Less than 50 g/l (less water & exempt compounds)
COATING VOC (as applied)	Less than 50 g/l (less water & exempt compounds)
RESIN TYPE	urethane dispersion
COMPONENTS	single component
SHELF LIFE	one year (unopened)
FLASH POINT	144° F ( 62° C)
RECOMMENDED DRY FILM THICKNESS	1.0 mils to 3.0 mils DFT
THEORETICAL COVERAGE	641 – 213 sq ft at recommended DFT (no loss)

### SURFACE PREPARATION

PC6 Topcoat is designed as a finish coat over properly prepared and primed substrates including steel, aluminum, galvanized steel, concrete, masonry, MDF, drywall, wood and previously coated surfaces. Substrates should be primed with DTM 1300 modified epoxy corrosion-resistant sanding primer, DTM 1600 single component bonding primer or DTM 3000 two component polyurethane primer: PC6 is not recommended for floors.

**Steel** – Clean the surface to ensure that the substrate is free of grease, dirt, wax, mildew and other contaminants (SSPC-SP1) and abrade to achieve SSPC-SP2, SP3, SP6, SP7 or SP11 levels of surface preparation. Precision's 02150 Metal Conditioner may be used to clean and treat steel substrates to eliminate oil, soap film, grease, and flash rusting.

**Aluminum & Galvanized Steel** – Clean the surface to ensure that the substrate is free of grease, dirt, wax, mildew and other contaminants SSPC-SP1. Utilize SSPC-SP 16 sweep blast for aluminum or galvanized steel or 02150 Metal Conditioner or comparable phosphoric acid conditioner to remove preservatives and prepare the surface for coatings.

**Concrete, Masonry, MDF, Drywall** – Surface must be clean, dry and free of any dirt, dust, grease, oil, wax, mildew, disintegrated or chalky materials or other contaminants.

**Previously Coated Surfaces** - Surface must be clean, dry, and free of any dirt, dust, grease, oil, wax, mildew, disintegrated or chalky materials or other contaminants. Aged coatings should be abraded to achieve an acceptable profile to provide adequate adhesion for the primer and topcoat.

## PRECISION COATINGS

1940 E. Trafficway, Springfield, MO 65802  
888.340.6780 or 417.862.5738 fax 417.862.8874  
[www.precisioncoatingsinc.com](http://www.precisioncoatingsinc.com)

# Technical Product Data

## **PC6 Series** **Waterborne Polyurethane Topcoat**



PRECISION COATINGS

### **INSTRUCTIONS**

Stir or shake thoroughly to ensure uniform mixture.

**Reduction is not necessary.** However, paint may be reduced up to 5% by volume using tap water.

### **APPLICATION FOR “SOLID COLORS” & “METALLIC COLORS”**

**Environmental Conditions:** Air and surface temperature must be above 50° Fahrenheit and no more than 90° Fahrenheit. Surface temperature must be at least 5°F (3°C) above the dew point

**Application:** Solid colors may be applied by spray, roller and brush application. Metallic colors should be applied by spray application only. Allow a 5 to 10 minute flash time between coats if spray applied. PC6 should be applied to achieve a recommended dry film thickness between 1.0 to 3.0 mils. For detailed metallic and iridescent application instructions, see Precision Coatings' Guidance: "Metallic and Iridescent Finishes."

### **SPRAY GUN SET-UP & PRESSURE**

<u>Type</u>	<u>Fluid Tip</u>	<u>Spraying Pressure</u>
Siphon Feed	1.4mm – 1.7mm	40-65-PSI
Gravity Feed	1.3mm – 1.4mm	40-65 PSI
HVLP Siphon	1.6mm – 1.8mm	max. 10 PSI @ the air cap
HVLP Gravity	1.3mm – 1.5mm	max. 10 PSI @ the air cap
Pressure Pot	1.1 mm- 1.3 mm	29 PSI - 58 PSI
Airless Spray*	.011" - .015"	2500 PSI, 100 mesh filter

*\*For solid colors only, not recommended for application of metallics*

### **DRY TIMES**

Dry times @ 70°F (21°C) and 50% RH

Dust Free	15 minutes
Dry to Touch	1 hour
Dry Time	24 hours
Full Cure	14 days
Recoat	Unlimited - no recoat time necessary Sanding will become necessary after 24 hours.

### **CLEAN UP**

Clean all tools and spray equipment immediately after use with soap and warm water. Acetone may be used as a final solvent rinse.

### **LIMITATIONS**

Protect installed coating from rain, freezing, and continuous high humidity until completely dry. Do not apply in freezing conditions or if rain is imminent. Do not apply if elevated levels of water vapor transmission may exist following application. At water vapor transmission levels greater than 4 perms, blistering or bubbles may occur. Do not use below grade, on horizontal surfaces or in areas of ponding water.

Refer to Material Safety Data Sheet for proper handling or products listed in this bulletin.

## **PRECISION COATINGS**

1940 E. Trafficway, Springfield, MO 65802  
888.340.6780 or 417.862.5738 fax 417.862.8874  
[www.precisioncoatingsinc.com](http://www.precisioncoatingsinc.com)

# Technical Product Data



## PC6 Series Waterborne Urethane Topcoat

PRECISION COATINGS

### PERFORMANCE DATA

TEST METHOD	SYSTEM (30 day, ambient temp. cure)	RESULTS
ASTM D-3359	Cold Rolled Steel	
Adhesion	Q-Panel	100% retention (no tape off)
	Solvent wipe 02150 Metal Conditioner	
	1.2 mils DFT PC6 Waterborne Urethane Topcoat	
ASTM D-4587	Cold Rolled Steel	Gloss - 82% retention after 1000 hours
QUV Resistance	Q-Panel	delta E color change - 0.7 after 1000 hours
Accelerated Weathering	Solvent wipe 02150 Metal Conditioner	No blistering, rusting, checking or cracking
	1.2 mils DFT PC6 Waterborne Urethane Topcoat	
ASTM B-117	Cold Rolled Steel	
Salt Fog	Q-Panel	No face blistering after 100 hours
	Solvent wipe 02150 Metal Conditioner	No face corrosion after 100 hours
	1.2 mils DFT PC6 Waterborne Urethane Topcoat	
ASTM D-2287	Cold Rolled Steel	
Humidity Resistance	Q-Panel	No blistering, cracking, softening or delamination after 100 hours
	Solvent wipe 02150 Metal Conditioner	Gloss - 88% retention after 100 hours
	1.2 mils DFT PC6 Waterborne Urethane Topcoat	
ASTM D-1308	Cold Rolled Steel	
Chemical Resistance	Q-Panel	Water resistance – rating 5 no effect
24 hour spot test	Solvent wipe 02150 Metal Conditioner	2 % Sulfuric Acid (Acid Rain) – rating 5 no effect
	1.2 mils DFT PC6 Waterborne Urethane Topcoat	
ASTM D-4366	Cold Rolled Steel	
Pendulum Hardness	Q-Panel	Glass = 100s
	Solvent wipe 02150 Metal Conditioner	PC6 Waterborne Urethane 94s
	1.2 mils DFT PC6 Waterborne Urethane Topcoat	
ASTM D-522	Cold Rolled Steel	
Flexibility	Q-Panel	180 degree bend, 1/4" mandrel - pass
	Solvent wipe 02150 Metal Conditioner	
	1.2 mils DFT PC6 Waterborne Urethane Topcoat	

*DISCLAIMER: The technical information and suggestions for use have been compiled for your guidance and usage. Such information is based on Precision Coatings, Inc. experience and research and is believed to be reliable. As PCI has no control over conditions in which the product is used, stored, or otherwise handled, the above information does not constitute a warranty. Buyers must assume responsibility for the suitability of the product for their purposes.*

11//2014

### PRECISION COATINGS

1940 E. Trafficway, Springfield, MO 65802  
888.340.6780 or 417.862.5738 fax 417.862.8874  
www.precisioncoatingsinc.com