

**PRODUCT DESCRIPTION**

51PC600™ is a high-performance, highly fluorinated acrylic aliphatic polyurethane top coat formulated for thin film applications, offering general ease of handling and application. It is a two-component, solvent based, high solids urethane system which exhibits outstanding performance properties, compared to higher build, multi-coat premium systems.

The patented “fluoroshield” protection of 51PC600™ makes it virtually impervious to moisture and oxygen permeation. 51PC600™ exhibits unsurpassed performance for all physical properties as well as resistance to chemicals, weathering and uv degradation.

51PC600 is ideal for use as an exterior architectural coating.

**CHARACTERISTICS**

A high performance, inert topcoat system designed to overcoat virtually any surface and make it resistant to corrosion, UV breakdown, abrasion and chemical attack. FPU® coatings exhibit outstanding weathering characteristics. Developed over two decades of research and development, FPU® has a proven service history.

51PC600™ is ideal for architectural, industrial and automotive equipment, ferrous and non-ferrous metals, masonry, timber, fiberglass and carbon fiber. It provides a high quality finish, and offers exceptional all round performance with an expected life span exceeding 20 years.

- Outstanding Hydrophobic and Oleophobic surface properties
- Impervious to moisture and oxygen permeation (Osmotic barrier)
- Highly flexible and outstanding impact and abrasion resistance
- Low surface energy which resists soiling and marking
- Highly resistant to attack by hydrocarbons and chemical products
- Completely insensitive to UV radiation

**Application**

For optimum appearance properties, 51PC600™ should be spray applied in two to three coats to a minimum of 2 mils DFT / 50 microns DFT. Always allow each coat to “flash off” to a tacked state prior to a following coat.

51PC600™ may also be spray applied, brushed or rolled in one coat, unreduced to the recommended DFT.

FPU® coatings must not be applied to surfaces at ambient temperatures above 35°C / 95°F. For optimum application properties, the temperature of the material should be between 10°C and 25°C / 50°F and 80°F prior to mixing and application. Apply the coating only when the surface temperature is more than 5°F or 3°C above the dew point temperature of the surrounding air and relative humidity is below 85%, in order to prevent moisture condensation on the surface.

**Mixing & Activation**

Mixing ratio 4:1 by volume (2 parts base to 1 part activator)

Reduction:            T-102 - Slow reducer  
                              T-100 - Fast reducer

Spray Viscosity:    21-25 seconds #2 Zahn

51PC600™ is a two component coating system supplied in two separate containers. Part A is the base and Part B is the activator. Prior to activation, Base component (Part A) must be thoroughly mixed by mechanical agitation. Following agitation, with a paint stick, ensure all settled material is removed from the can bottom. After activation of Component A and Component B together, agitate for approximately 1-2 minutes. Reduce activated 51PC600™ to a maximum of 15% if required with recommended reducer and use immediately. 51PC600™ requires no induction period.





**Pot Life**

**3 Hours @ 21°C / 70°F**  
**1 1/2 Hours @ 32°C / 90°F**    **However, these times may vary with environmental or climatic conditions**

This material and its components are moisture sensitive. The product should be kept covered at all times after mixing and during application to prevent contamination and prevent moisture absorption.



**Curing**

Dry time @ 21°C / 70°F ambient air cure  
 Tack free: 4-6 Hours  
 Hard Cure: 16 hours  
 Full Cure: 3-5 days  
 Elevated Curing 40°C - 60°C / 105°F - 140°F for 40 minutes



**Colors & Finishes**

White, Clear and a full range of colors are available including metallic and pearlescent finishes.

High Gloss - > 90 / 60°  
 Semi-Gloss - 50-60 / 60°



**Surface Preparation**

Suitable substrates for 51PC600™ include ferrous metal, galvanized metal, aluminum, fiberglass, carbon fiber, concrete and wood. Good surface preparation and cleaning of all substrates to be coated is essential for optimum performance of the coating system. All surfaces to be coated should be clean, dry and free from contaminants. For old or previously finished surfaces, the degree of preparation and cleaning required, is dependent upon the condition of the substrate.

Consult your 21<sup>st</sup> Century Coatings (Canada) Ltd. representative for recommended surface preparation procedures for your specific project.



**Coverage**

**51PC600™ exhibits excellent opacity and coverage when spray applied. If applying colors by means other than spray, test opacity over a small section to ensure adequate coverage prior to general application.**

Solids content (+/- 2%)	75% by weight 61.67% by volume
Number of Coats	2-3 coats at 50 microns / 2 mils DFT
Coverage (theoretical)	19.66 m <sup>2</sup> per litre @ 25 microns / 1 mil DFT 963 ft <sup>2</sup> per gallon @ 25 microns / 1 mil DFT



**Storage & Handling**

Hazardous Goods:                    Paint, Flammable Liquid, UN1263 Class III Hazchem 3YE

Shipping Information:            8.30 kg/18.25 lbs. per gallon unit including container

VOC content:                        335 grams per liter / 2.8 lbs. per gallon

Flash Point (Seta Flash):        34°C / 93°F

Storage - FPU® coatings must be stored and handled in compliance with all current local regulations applying to flammable, or highly flammable liquids. Store in cool, dry, protected storage, well ventilated, between 5°C-35°C / 40°F-95°F and out of direct sunlight, moisture or rain. Maintain unmixed material in sealed containers at all times.

Shelf Life - FPU® has a minimum shelf life of 12 months from the date of manufacture if stored as indicated above, unopened in sealed containers. Ensure both components are consistent in appearance and thickness after stirring, and ensure that the activator (Part B) is clear and transparent before mixing the components together.

**Do not use activator that is not visually clear.**

