



MIRATHANE APU 100

PRODUCT DESCRIPTION

APU 100 Clear Gloss, Matte, and Pigmented represent the next generation of urethane topcoats. These materials are based on blends of aliphatic polyester urethane, which are ultraviolet light stable. In addition, they provide high chemical and abrasion resistance. The VOC's are less than 100 grams per liter and are compliant with current AQMD Industrial Maintenance Coating Guidelines.

APU 100 Clear Gloss Aliphatic Polyester Urethane Topcoat has a high gloss finish (>85°) and APU 100 Matte Aliphatic Polyester Urethane Topcoat has a matte finish (<40°). Both systems are highly durable, chemical resistant floor topcoat and finish coat designed for use in aircraft hangars, service bays, manufacturing areas, etc. and as a high-performance finish coat for many Miracote systems. APU 100 has excellent cleanability and superior long-term appearance.

They conform to all requirements of U.S. General Services Administration Specification A-A-50542 (Coating System: Reflective, Slip Resistant, Chemical-Resistant Urethane for Maintenance Facility Floors).

APU 100 is applied over an epoxy primer coat. For additional skid resistance it is also available in four moderate to aggressive skid resistant profiles that are created by broadcasting into a pre-engineered aluminum oxide blended aggregates.

The South Coast Air Quality Management District (SCAQMD) Rule 1113, affected July 1, 2006, restricts the allowable volatile organic content (VOC) of coatings and sealers in the following California Counties: Los Angeles, Orange, Riverside and San Bernardino only. APU 100, as currently formulated, meets the new standards.

This product can be used in both interior and exterior service. APU 100 possesses excellent resistance to ultraviolet light including freedom from color change or degradation.

WHERE TO USE

APU 100 Clear Gloss and APU 100 Pigmented Matte Urethane Coating are high performance aliphatic polyester urethanes that are designed for use in manufacturing areas, automobile service bays, aircraft hangars, etc. and as a high-performance finish coat for many Miracote systems.

ADVANTAGES

- Excellent cleanability and abrasion resistance.
- Resists wide range of service area chemicals.
- Complies with VOC regulations.
- Convenient 1 to 1 mix ratio.
- Installed only by Professional Factory Trained Miracote Contractors.

COVERAGE RATES

250 sq. ft. per mixed gallon at 6.4 mils wet film thickness.

PACKAGING AND COLORS

7166-1GCA-G	Mirathane APU 100 Clear (A – 1 gallon can)
7166-5GPA-G	Mirathane APU 100 Clear (A – 5 gallon pail)
7166-1GCA-M	Mirathane APU 100 Matte (A – 1 gallon can)
7166-5GPA-M	Mirathane APU 100 Matte (A – 5 gallon pail)
7166-1GCA-S	Mirathane APU 100 Satin (A – 1 gallon can)
7166-5GPA-S	Mirathane APU 100 Satin (A – 5 gallon pail)

7166-1GCA-TB	Mirathane APU 100 Tint Base (A – 1 gallon can)
7166-5GPA-TB	Mirathane APU 100 Tint Base (A – 5 gallon pail)
7167-1GCB-G	Mirathane APU 100 Clear (B – 1 gallon can)
7167-5GPB-G	Mirathane APU 100 Clear (B – 5 gallon pail)
7167-1GCB-M	Mirathane APU 100 Matte (B – 1 gallon can)
7167-5GPB-M	Mirathane APU 100 Matte (B – 5 gallon pail)
7167-1GCB-S	Mirathane APU 100 Satin (B – 1 gallon can)
7167-5GPB-S	Mirathane APU 100 Satin (B – 5 gallon pail)
7167-1GCB-TB	Mirathane APU 100 Tint Base (B – 1 gallon can)
7167-5GPB-TB	Mirathane APU 100 Tint Base (B – 5 gallon pail)

MIX RATIO

Mix one part Comp. A with one part Comp. B, by volume.

SHELF LIFE AND STORAGE

One year from package manufacturing date. Keep in dry storage area until ready for use.

TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C)

Cured System Thickness Primer and Two Coats	13 mils dry
Pencil Hardness ASTM D3363-05.....	2-3H
Impact Resistance ASTM D2794	Direct..... 160 in/lbs
	Reverse..... 160 in/lbs
Flexibility ASTM D522 (180° Bend, 1/8" Mandrel).....	Passes

Coefficient of Friction-Rubber Shoe Surface (MIL-D-3134 Test Procedure)

Profiles	Static Friction Saltwater Solution on	Static Friction Oil on on surface	Sliding Friction Saltwater Solution on	Slide Friction Oil on surface
Fine	0.85	0.65	0.79	0.40
Medium.....	0.93	0.70	0.85	0.45
Coarse.....	0.99	0.75	0.95	0.50

Chemical Resistance ASTM D1308 (See Chemical Resistance Chart)

Gasoline.....	No effect	Isopropyl Alcohol	No effect
Kerosene.....	No effect	Hydrogen Peroxide 50%	Slight Stain
Skydrol	No effect	Hydrochloric Acid 25%	No effect

Gloss, 60 degrees ASTM D523 Clear

.....>85
Matte.....<40

Tensile Strength ASTM D882.....	8,600 psi
Elongation ASTM D882.....	10%
Abrasion Resistance ASTM D4060.....	30 mg/loss
	1000g/1000 cycles, CS-17 Wheel
Microbial Resistance ASTM G21	Passes Rating 1

OVERVIEW OF INSTALLATION STEPS

(Please refer to the following and contact Miracote with questions)

- Prepare surface by careful and thorough removal of laitance, grease, and foreign matter.
- Apply epoxy primer coat, filling existing cracks or voids in the concrete.
- Spread bodycoat by squeegee and backroll in two coats to achieve a uniform thickness.
- Optional: For additional skid resistance broadcast one of Miracote's pre-engineered, skid-resistant, blended aggregates



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into the primecoat. Topcoat the primecoat prior to placement of APU 100.

For Best Results:

Install a minimum 4' by 4' test area site mock up for approval of acceptable color, texture, finish, adhesion, and any other critical requirement acceptable to the owner prior to proceeding with the installation.

Verify current versions of product technical data sheets (PTDS), material safety data sheets (MSDS), and installation guidelines (IG) at www.miracote.com.

Protect materials from excessive heat and cold and regularly check wet film thickness with mil gauge and monitor consumption to ensure correct application thicknesses and rate are obtained.

LIMITATION

- Substrate must be above 50°F (10°C), dry and free of excessive water vapor transmission with a relative humidity below 85% at time of installation.
- Moving cracks in concrete may reflect through finish. A waterproofing and crack isolation membrane can be installed prior to system application.

Moisture vapor transmission (MVE) in excess of 3.0 lbs./1000 sq ft per 24 hr. period per ASTM F1869-04, may result in delamination, discoloration or improper curing. Use Miracote MVERS™ II Primer vapor control membrane over substrates, which have MVE emissions that exceed these limits. Consult with Crossfield prior to using MVERS II™ Primer if moisture vapor transmission exceeds 15 lbs/1000 sq/ft/per 24 hr period per ASTM F1869-04.

PRODUCT AVAILABILITY

Crossfield Products Corp. maintains offices and/or factories at all addresses listed below. Factory Trained Contractors are established in all major trading areas in the United States, Canada and various European, Latin American and Far East nations.

MAINTENANCE

For maximum sheen and cleanability, floor should be routinely treated with conventional maintenance finish followed by ordinary buffing.

SPECIFICATION ASSISTANCE

Consult Crossfield Products Corp. for specification assistance, detailing, etc. This consultation is highly recommended prior to specification.

SLIP RESISTANCE and CLEANABILITY

In general, the more aggressive the finished surface the greater the coefficient of friction and corresponding slip resistance, the more difficult to clean. The smoother the finished texture the easier the surface is to clean, but there is a loss of skid resistant properties.

CLEANING

Cleaning and disinfecting compounds and cleaning techniques can affect the color, gloss, texture and performance of the system. As a precautionary step, Crossfield recommends that the end-user test their cleaning and disinfecting compounds on a sample or on a small, out of the way finished area, utilizing the intended cleaning technique prior to cleaning the entire surface area. If no deleterious effects are observed, the procedure can be continued. If the cleaning and disinfecting compounds or cleaning techniques damage the system, modification of the cleaning material or techniques will be required. Contact your Representative for additional information.

LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN CROSSFIELD PRODUCTS CORP. INVOICES ARE MET.

Crossfield Products Corp. warrants to the purchaser of its products that such products are free from manufacturing defect. Crossfield does not warrant or guarantee the workmanship performed by any person or firm installing its products. Crossfield's obligation under this warranty is limited solely to the original purchaser and solely to the remedy of replacement in kind of any product which Crossfield sold which may prove defective in manufacture within one year from date of installation, provided said product was stored correctly and installed within the product's shelf life, by the original purchaser and which Crossfield's examination shall disclose to Crossfield's satisfaction to be thus defective.

IN NO EVENT SHALL CROSSFIELD PRODUCTS CORP. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY IS EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON CROSSFIELD'S PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY PERSON OR PERSONS TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH SALE OF A CROSSFIELD PRODUCT. THIS WARRANTY SHALL NOT APPLY TO ANY OF CROSSFIELD'S PRODUCTS, WHICH HAVE BEEN SUBJECT TO ADULTERATION, ALTERATION ABUSE OR MISUSE. CROSSFIELD PRODUCTS CORP. MAKES NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES, PARTS OR MATERIAL NOT SUPPLIED BY CROSSFIELD PRODUCTS CORP., WHICH ARE USED IN CONNECTION WITH ITS PRODUCTS. THE TERM "ORIGINAL PURCHASER" IN THIS WARRANTY MEANS THAT PERSON, CORPORATION OR ENTITY TO WHOM CROSSFIELD PRODUCTS CORP. SOLD ITS PRODUCTS. ANY ACTION TO ENFORCE ANY WARRANTY OR FOR BREACH OF CONTRACT OR ARISING OUT OF ANY CLAIM AGAINST CROSSFIELD PRODUCTS CORP. SHALL BE COMMENCED AND MAINTAINED ONLY IN A COURT OF COMPETENT JURISDICTION IN THE CONTINENTAL UNITED STATES OF AMERICA. THE PURCHASER ACCEPTS THESE TERMS AND CONDITIONS, AND HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



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