



MPC101

Matthews Acrylic Polyurethane

MAP[®] SPECIFICATIONS

MAP[®] (Matthews Acrylic Polyurethane): An ultraviolet inhibited aliphatic, acrylic polyurethane system **engineered for extreme color and gloss retention.** Lead and heavy metal free.

Performance Data

Unexcelled weather resistance even in harsh industrial environments. Slick, hard surface resists dirt, pollutants, and abrasion. Withstands chipping, color-fade, gloss loss and graffiti on interior and exterior surfaces.

Characteristics

Gloss: 90 ± 5 units @ 60° for gloss colors

Satin: 20 ± 5 units @ 60° for Satin gloss colors

Flat: 10 ± 5 units @ 60° for flat colors

Recommended Systems:

Steel:

274 908SP/274 909SP White Epoxy Primer @ 2.0 – 3.0 mils DFT. **or**
6013SP Black Epoxy Primer @ 1.2 – 1.5 mils DFT. **or**
6001SP Polyester Primer Surfacer @ 2.0 – 10 mils DFT.
Topcoat Matthews Acrylic Polyurethane 2.0 mil DFT. (min.)

Aluminum:

74 34SP/74 735SP Metal Pretreatment @ 0.25 – 0.35 mils DFT. **or**
74 760SP/74 766SP PT Filler @ 0.40 – 0.80 mils DFT. **or**
74 770SP/74 766SP HBPT @ 0.7 – 1.3 mils DFT. **or**
274 908SP/274 909SP White Epoxy Primer @ 2.0 – 3.0 mils DFT. **or**
6013SP Black Epoxy Primer @ 1.2 – 1.5 mils DFT. **or**
6001SP Polyester Primer Surfacer @ 2.0 – 3.0 mils DFT.
Topcoat Matthews Acrylic Polyurethane 2.0 mils DFT. (min.)
For clear coating, one coat 74 793SP Spray Bond @ 0.15 – 0.25 mils DFT. and 2 coats MAP Clear 2.0 mils DFT. (min.)

Recommended Systems: continued

Masonry:

274 908SP/274 909SP White Epoxy Primer @ 2.0 – 3.0 mils DFT. **or**
6013SP Black Epoxy Primer @ 1.2 – 1.5 mils DFT.
Topcoat Matthews Acrylic Polyurethane @ 2.0 mil DFT. (min.)

Wood:

274 908SP/274 909SP White Epoxy Primer @ 2.0 – 3.0 mils DFT. **or**
6013SP Black Epoxy Primer @ 1.2 – 1.5 mils DFT.
Topcoat Matthews Acrylic Polyurethane 2.0 mil DFT. (min.)

Fiberglass:

274 908SP/274 909SP White Epoxy Primer @ 2.0 – 3.0 mils DFT. **or**
6001SP Polyester Primer Surfacer @ 2.0 – 3.0 mils DFT. **or**
6010SP Flexible Sealer @ 0.8 – 1.2 mils DFT. **or**
6013SP Black Epoxy Primer @ 1.2 – 1.5 mils DFT.
Topcoat Matthews Acrylic Polyurethane 2.0 mil DFT. (min.)

Expanded PVC:

74 777SP Tie Bond 0.4 - 0.6 mils DFT.
Topcoat Matthews Acrylic Polyurethane 2.0 mil DFT (min.)

Brass, Bronze & Copper:

Apply Braco Pretreatment 74 737SP.
1 coat 74 793SP Spray Bond @ 0.15 – 0.25 mils DFT.
Topcoat 42 260SP Braco Clear 2.0 mil DFT. (min.)

Photopolymer:

74777SP Tie Bond @ 0.4 - 0.6 mils DFT.
6010SP Flexible Sealer @ 0.8 – 1.2 mils DFT.
Topcoat Matthews Acrylic Polyurethane 2.0 mil DFT (min.)

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Performance Characteristics

Air-Dry (50% relative humidity 70°F / 21°C)

Dust Free Time

With Accelerator 287 437SP	15 minutes
Without Accelerator	15 minutes

Tack Free Time

With Accelerator	1 hour
Without Accelerator	2-hours

Taping Time

With Accelerator 287 437SP	2-4 hours
Without Accelerator	16 hours

Dry To Handle

With Accelerator 287 437SP	4 hours
Without Accelerator	24 hours

Dry To Clearcoat

With Accelerator 287 437SP	15 minutes
Without Accelerator	30 minutes

Baking Dry Time with 43 999 Slow Catalyst

Temperatures over 350°F / 177°C should be avoided.

Allow 10 – 15 min. flash before baking to prevent solvent popping.

60 min @ 150°F / 66°C
30 min @ 200°F / 94°C
10 min @ 300°F / 150°C

Pot Life @ 70°F / 21°C

With Accelerator 287 437SP	2 hours
Without Accelerator	8 hours

Hardness

2 H

Gloss 20

70+

Gloss 60

90+

Flexibility

1/8" mandrel, No Cracks

Impact Resistant - Direct

120 ins./lbs.

One week

Theoretical Coverage (Varies somewhat with color)

@1 mil DFT (dry film thickness) 500 sq. ft. per (RTS)gal.

Flash Point (Tag Closed Cup) Below 80°F 28°C

Recommended Dry Film Thickness 2.0 mil DFT min.

Volume Solids 33% – 43%

Volume Solids (RTS) 25% - 31%

Application Conditions 60°F/16°C minimum

100°F/38°C maximum

Relative Humidity 85% maximum

Substrate Temperature 5° above dew point,
60°F/16°C minimum

Equipment Conventional, HVLP or
Electrostatic

Package VOC 4.3 – 5.0

RTS VOC 5.0 – 5.5

Solvent Resistance

30 minute contact after 7 days curing Excellent

Chemical Resistance 10% Solutions

Acids Excellent

Alkalis Excellent

Salt Spray - 2000 hours No Effect

Gloss Retention - Weatherometer

1000 hours @ 20° 88%

1000 hours @ 60° 97%

Abrasion Resistance

1000 revolutions CS-10 wheel .248 grams

Caution: All 2 component cross-linking stops or slows significantly at temperatures below 60° F or 16° C. Never spray or subject freshly painted coatings to these conditions or loss of gloss, poor water and chemical resistance, decreased durability and improper curing will occur.

See Material Safety Data Sheet and Labels for additional safety information and handling instructions.

EMERGENCY MEDICAL OR SPILL CONTROL INFORMATION - US (412) 434-4515; CANADA (514) 645-1320; MEXICO 01-800-00-21-400

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If you require technical assistance, please call us toll-free 800/323-6593.



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