



MPC108

Matthews VOC High Solids Acrylic Polyurethane

VOC MAP® SPECIFICATIONS

VOC MAP® (Matthews Acrylic Polyurethane): A low VOC (volatile organic compounds) compliant coating which exceeds EPA standards for solvents. It is an ultraviolet inhibited aliphatic, acrylic polyurethane system engineered for extreme color and gloss retention. Lead and heavy metal free.

Performance Data

Identical to standard Matthews Acrylic Polyurethane (MAP®) performance and durability.

- Outstanding 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 808SP/274 909SP Black Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
274 908SP/274 909SP White Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
274 228SP/274 229SP E Prime @ 2.0 – 3.0 mils DFT. **or**
6001SP Polyester Primer Surfacer @ 2.0 – 10 mils DFT.
Topcoat VOC MAP® 2.0 mils DFT. (min.)

Aluminum:

274 808SP/274 909SP Black Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
274 908SP/274 909SP White Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
74 734SP/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**
6001SP Polyester Primer Surfacer @ 2.0 – 3.0 mils DFT.
Topcoat VOC MAP® 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 228SP/274 229SP E Prime @ 2.0 – 3.0 mils DFT. **or**
274 808SP/274 909SP Black Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
274 908SP/274 909SP White Epoxy Primer @ 1.5 – 2.0 mils DFT.
Topcoat VOC MAP® 2.0 mils DFT. (min.)

Wood:

274 228SP/274 229SP E Prime @ 2.0 – 3.0 mils DFT. **or**
274 808SP/274 909SP Black Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
274 908SP/274 909SP White Epoxy Primer @ 1.5 – 2.0 mils DFT.
Topcoat VOC MAP® 2.0 mils DFT. (min.)

Fiberglass:

274 228SP/274 229SP E Prime @ 2.0 – 3.0 mils DFT. **or**
274 808SP/274 909SP Black Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
274 908SP/274 909SP White Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
6001SP Polyester Primer Surfacer @ 2.0 – 3.0 mils DFT.
Topcoat VOC MAP® 2.0 mils DFT. (min.)

Expanded PVC:

74 777SP Tie Bond 0.4 - 0.6 mils DFT.
Topcoat VOC MAP® 2.0 mils DFT. (min.)

Brass, Bronze & Copper:

Apply Braco Pretreatment 74 737SP.
1 coat 74 793SP Spray Bond @ 0.15 – 0.25 mils DFT.
Topcoat 282 260SP Braco Clear 2.0 mil DFT. (min.)

Photopolymer:

Topcoat VOC MAP® 2.0 mils DFT. (min.)

VOC MAP[®] SPECIFICATIONS

Performance Characteristics

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

Dust Free Time

With Accelerator 287 484SP 20 - 30 minutes

Tack Free Time

With Accelerator 287 484SP 1.5 - 2 hours

Taping Time

With Accelerator 287 484SP 4 - 6 hours

Dry To Handle

With Accelerator 287 484SP 60 - 90 minutes

Dry To Clearcoat

With Accelerator 287 484SP 20 - 30 minutes

Baking Dry Time

Temperatures over 195°F / 91°C should be avoided.

Allow 30 - 45 min. flash before baking to prevent solvent popping.

60 min @ 150°F / 66°C

30 min @ 195°F / 94°C

Pot Life @ 70°F / 21°C

With Accelerator 287 484SP 1 - 2 hours

Hardness

2 H

Gloss 20

80+

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 @ 100% transfer efficiency) 760 - 775 sq. ft./(RTS) gal.

Flash Point (Tag closed cup)

Below 80°F 28°C

Recommended Dry Film Thickness

2.0 mil DFT minimum

Volume Solids

54% - 57%

Volume Solids (RTS)

48% - 51%

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

2.9 - 3.2 lbs./gal.

RTS VOC

VOC exempt reducer 2.8 lbs./gal.

Non-exempt reducer 3.5 lbs./gal.

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

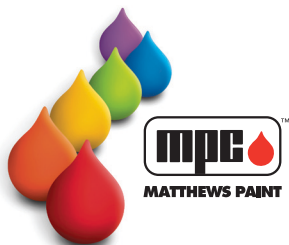
Caution: All 2 component cross-linking stops or slows significantly at temperatures below 60°F or 16°C. Never spray or subject freshly painted coatings to these conditions or loss of gloss, poor water and chemical resistance, decreased durability and improper curing will occur.

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

Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the general public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to Matthews Paint. Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results, or fitness for any intended use, nor does Matthews Paint warrant freedom from patent infringement in the use of any formula or process set forth herein.

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



The World's Finest Coating For Architectural Signage

760 Pittsburgh Drive

Delaware, OH 43015

Toll Free: 800/323-6593

Toll Free FAX: 800/947-0377