Matthews Acrylic Polyurethane

MPC211

MAP-LV® SPECIFICATIONS

MAP®-LV (Matthews Acrylic Polyurethane) is an ultra-low VOC, ultraviolet inhibited, acrylic polyurethane system engineered for extreme color and gloss retention. It exhibits excellent flexibility and is lead and heavy metal free.

Performance Data

Excellent weather resistance even in harsh industrial environments. Slick 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: 5 ± 5 units @ 60° for flat colors

Recommended Low VOC Systems

Steel:

- MAP-LVU100 Ultra-Low VOC Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
- 274 528SP/274 529SP 2.1 VOC Gray Epoxy Primer @ 1.0 – 3.0 mils DFT **or**
- 6001SP Polyester Primer Surfacer @ 2.0 – 10 mils DFT.
- Topcoat MAP-LV Acrylic Polyurethane 2.0 mil DFT. (min.)

Aluminum:

- MAP-LVU100 Ultra-Low VOC Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
- 274 528SP/274 529SP 2.1 VOC Gray Epoxy Primer @ 1.0 – 3.0 mils DFT **or**
- 6001SP Polyester Primer Surfacer @ 2.0 – 3.0 mils DFT.
- Topcoat MAP-LV Acrylic Polyurethane 2.0 mils DFT. (min.)
- For clear coating, two coats 274 793SP Spray Bond @ 0.15 – 0.25 mils DFT. and 2 coats MAP LVC208 Clear 2.0 mils DFT. (min.)

Masonry:

- MAP-LVU100 Ultra-Low VOC Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
- 274 528SP/274 529SP 2.1 VOC Gray Epoxy Primer @ 1.0 – 3.0 mils DFT
- Topcoat MAP-LV Acrylic Polyurethane @ 2.0 mil DFT. (min.)

Wood:

- MAP-LVU100 Ultra-Low VOC Epoxy Primer @ 1.5 – 2.0 mils DFT **or**
- 274 528SP/274 529SP 2.1 VOC Gray Epoxy Primer @ 1.0 – 3.0 mils DFT
- Topcoat MAP-LV Acrylic Polyurethane 2.0 mil DFT. (min.)

Fiberglass:

- MAP-LVU100 Ultra-Low VOC Epoxy Primer @ 1.5 – 2.0 mils DFT. **or**
- 274 528SP/274 529SP 2.1 VOC Gray Epoxy Primer @ 1.0 – 3.0 mils DFT **or**
- 6001SP Polyester Primer Surfacer @ 2.0 – 3.0 mils DFT.
- Topcoat MAP-LV Acrylic Polyurethane 2.0 mil DFT. (min.)

Expanded PVC:

- 274 777SP Tie Bond two coats @ 0.4 - 0.6 mils DFT.
- Topcoat MAP-LV Acrylic Polyurethane 2.0 mil DFT (min.)

Photopolymer:

- 274 777SP Tie Bond two coats @ 0.4 - 0.6 mils DFT.
- Topcoat MAP-LV Acrylic Polyurethane 2.0 mil DFT (min.)

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Product Information Effective 12/16
Part No. MPC211 12/16
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Performance Characteristics

Dry Times (Air-Dry @ 50% Relative Humidity 70°F/21°C)

LVS & LVG (Mixed 3:1:1 with LVX270 and Reducer)

Reducer	Accelerator*	Dust Free	Print Free	Dry to Handle	Tape Time	Pot Life
MAP-LVRS02	LVA117	10-15 minutes	20 minutes	2-5 hours	2-3 hours	40 minutes
MAP-LVRS02	287 484	10-15 minutes	15-20 minutes	2-4 hours	1-2 hours	30 minutes
MAP-LVRS02	SM166A	5-10 minutes	10-15 minutes	1-2 hours	45-60 minutes	20 minutes

*All accelerators added at 4oz per RTS gallon

Baking Dry Time ..... 20 min @ 140°F/60°C
- Temperatures over 180°F/82°C should be avoided.
- Allow 10 – 15 min. flash before baking to prevent solvent popping.

Pencil Hardness..... HB

Flexibility.....1/8" Mandrel, No Cracks

Impact Resistance
Forward @ 2 Weeks Air Dry.....150+ in/lbs
Reverse @ 2 Weeks Air Dry.....150+ in/lbs

Theoretical Coverage (Varies with Color)
1 mil DFT @ 100% Transfer Efficiency..... 732-802 sq ft per (RTS) gal

Flash Point (Tag Closed Cup)..... Below 70°F/21°C

Recommended Dry Film Thickness . 2.0 mil DFT min.

Volume Solids..... 47.1% – 61.2%

Volume Solids (RTS)..... 40.9% - 50.8%

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 ..... 0.49 – 0.99 lbs/gal

RTS VOC..... 0.36 – 0.70 lbs/gal

Solvent Resistance
100 MEK Double Rubs @ 1 Day Air Dry..... No Effect

Chemical Resistance 10% Solutions
Acids ..... No Effect
Alkalis ..... No Effect

Salt Fog - 1000 hours
Adhesion Rating..... 5A
Scribe Creep Rating..... 9
Face Blister Rating..... 9

Gloss Retention – QUV B
1500 hours @ 60° 92%

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.