



MPC210

**Acrylic Polyurethane Ultra Low VOC**

# MAP-LVS

MAP-LV (Matthews Acrylic Polyurethane Ultra Low VOC) is designed to exceed the most stringent VOC regulations while retaining our full color range. In addition, this flexible high-solids, chemically cross-linked coating offers exceptional outdoor durability, UV and chemical resistance, and great impact, mar and abrasion resistance. This product can be applied over many properly prepared and primed substrates such as aluminum, steel, wood, or other existing coatings. MAP-LV is formulated to deliver less than 50g/L VOC in standard solid color applications. The use of metallics and/or special reducers will increase the VOC level slightly.



**Features:**

**Benefits:**

Durable yet flexible film .....	Impact and mar resistant
Satin-in-the-can.....	No additional flattening agent needed, Consistent gloss and finish, Less time to mix
Air-dry or force-dry capable .....	Fits most shop conditions
Excellent UV resistance .....	Excellent color and gloss retention; Extended life cycle; Reduced maintenance costs
2K Acrylic polyurethane.....	Resistance to weathering; Resistance to chalking, Long-term durability
Ultra low VOC technology .....	Environmentally friendly; Complies with most stringent VOC requirements; High solids
Brush and roll capability.....	For use in areas where air spraying is prohibited

**Compatible Surfaces:**

**MAP-LVS Acrylic Polyurethane Ultra Low VOC may be applied over properly prepared:**

6001SP Polyester Primer Surfacer	74350SP 3.5 Non-Chromate Primer	LVU100 Ultra Low VOC Epoxy Primer
6007SP 3.5 Gray Epoxy Primer	74 734SP Metal Pretreatment	SMPFV205A Chromate Free 3.5 VOC Wash Primer
274 685SP U Prime	74 760SP PT Filler	SMHB404A Urethane Filler
274 808SP Black Epoxy Primer	74 770SP HBPT	SMP001A Epoxy Gray Primer
274 908SP White Epoxy Primer	74 780SP HBEP	SMP002A Epoxy White Primer
274 528SP 2.1 VOC Gray Epoxy Primer	74 777SP Tie Bond	SH5106 White Primer
274 530SP 2.1 VOC White Epoxy Primer	274 777SP Low VOC Tie Bond	Z6248 1K WB White Primer
274 531SP 2.1 VOC Black Epoxy Primer	274 793SP Low VOC Spray Bond	

**Associated Products:**

Catalyst	Reducer	Accelerator
MAP-LVX270 Catalyst	MAP-LVRS01 Cool Temp. Spray Reducer	287 437SP HS Accelerator
	MAP-LVRS02 Warm Temp. Spray Reducer w/ Extender	MAP-LVA117 Ultra Low VOC Accelerator
	MAP-LVRS03 Hot Temperature Spray Reducer w/ Extender 80° & Above	47117SP MAP Accelerator
	MAP-LVRB51 Brush and Roll Reducer	287 484SP HS Turbo Enhancer
		SM166A Tape-It Accelerator

# MAP-LVS

## Directions for Use

### Surface Preparation:

Substrate should be prepared according to Matthews Substrate Preparation Guide prior to topcoat application.

### Mix Ratio:



Mix Ratio for Spraying (by volume)

MAP-LVS      LVX270      LVRS0x\*      with Accelerator\*\*

3 parts      1 part      1 part      Up to 1oz/RTS quart

**\*Choose MAP reducer**

- MAP-LVRS01 Cool Temp. Spray Reducer
- MAP-LVRS02 Warm Temp. Spray Reducer with Extender
- MAP-LVRS03 Hot Temperature Spray Reducer with Extender 80° & Above
- NOTE: Larger jobs may require a hotter temperature reducer.

**\*\*Caution: use of accelerator with LVRS01 is Not Recommended as it will drastically shorten pot life.**

- For Brushing and Rolling, refer to Technical Data Sheet MPC193.
- All components should be mixed thoroughly before using
- Strain material after mixing



**Pot Life:** Pot-life is the amount of time before spray viscosity doubles. These are estimates based on lab results at 50% relative humidity, 70°F/21°C—results will vary based on application conditions, reducer selection, and accelerator choice.

Note: mix no more product than can be used within time limits listed below:

Application Method	Reducer	Accelerator*	Max load of accelerator per RTS qt	Pot-Life
Spraying	MAP-LVRS01	Not Recommended		4 hours
	MAP-LVRS02 or MAP-LVRS03	287 437SP	1.5 oz	1.5 hours
		MAP-LVA117	1 oz	1 hour
		47117SP	1 oz	1 hour
		287 484SP	½ oz – 1 oz	1 hour
	SM166A	¼ oz – 1 oz	30 minutes	
Brush and Roll	LVRB51	Not Recommended		2 hours

\*Times listed in the chart above are for a full load of accelerator.

### Additives:



None required, but the following may be used for specific application or project needs:

- 287 112SP Medium Suede Additive
- 287 113SP Coarse Suede Additive

### Spray Set Up:



Air Pressure:      Conventional:      40 - 50 psi at the gun\*

HVLP:      10 psi at the cap\*

**\* Refer to spray gun manufacturer recommendations for inlet pressure.**



Pressure Pot Fluid Delivery:      8 - 12 Fluid Ounces per Minute



Gun Set Up:      Siphon Feed:      1.2 - 1.4 mm 0.047 - 0.055 fluid tip

HVLP:      1.2 - 1.4 mm 0.047 - 0.055 fluid tip

Pressure Pot:      1.0 - 1.2 mm 0.039 - 0.047 fluid tip

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## Directions for Use

### Application:



Apply:

Apply two full wet coats, allowing proper flash time\* between coats. Apply additional coats as necessary to achieve total dry film thickness and/or metallic control.

\*Flash times will vary dependent upon film thickness, temperature, solvent selection, spray gun set-up, application, etc.

Recommended Film Thickness:		Per Coat	Total
	Wet Film Thickness (WFT)	2 - 3 mils	4 - 6 mils
	Dry Film Thickness (DFT)	1 mils	2 mils

**Caution:** All 2-component crosslinking slows significantly at temperatures below 60°F or 16°C. Never spray or subject freshly painted coatings to these conditions or loss of gloss, decreased durability and improper curing can occur.

### Estimated Drying Times:



Air-Dry @ 50% Relative Humidity, 70°F/21°C  
LVS (Mixed 3:1:1 with LVX270 and Reducer)

Reducer	Accelerator*	Dust Free	Set to Touch	Dry to Handle	Tape Time	Vinyl Application (2-3 mils)	Reflective Metallic Vinyl Application
MAP-LVRS01	Not recommended	10-15 minutes	25-35 minutes	45-60 minutes	1-2 hours	8-11 hours	16-22 hours
MAP-LVRS02 or MAP-LVRS03	287 437SP	10-15 minutes	15-20 minutes	25-45 minutes	1-1½ hours	7-10 hours	12-16 hours
	MAP-LVA117	10-15 minutes	15-20 minutes	25-45 minutes	1-1½ hours	7-10 hours	12-16 hours
	47117SP	10-15 minutes	15-20 minutes	25-45 minutes	1-1½ hours	7-10 hours	12-16 hours
	287 484SP	10-15 minutes	15-20 minutes	25-40 minutes	45-60 minutes	5-7 hours	9-14 hours
	SM166A	10-15 minutes	15-20 minutes	25-35 minutes	45-60 minutes	4-7 hours	8-14 hours

\*Times listed in the chart above are for a full load of accelerator.

**Recoating:** Paint films cured over 24 hours should be cleaned, lightly dry scuff sanded with 320 – 400g by hand/machine or wet sanded with 600g, then cleaned again before recoating.

**Force Dry:** Allow 30 minute purge before baking to prevent solvent popping. Bake for 40 minutes at 140°.

### Equipment Cleaning:

Clean equipment promptly with any low VOC all-purpose cleaning solvent. Acetone should be used for cleanup in environmentally regulated areas.

**Note: Do not leave mixed material in equipment.**

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Acrylic Polyurethane Ultra Low VOC

## Technical Data:

### VOC Information

VOC Actual RTS	0.18 – 1.91 lbs/gal
VOC Actual RTS	22 – 229 g/L
VOC Regulatory (less water less exempt) RTS	0.38 – 2.34 lbs/gal
VOC Regulatory (less water less exempt) RTS	46 – 280 g/L

For complete VOC information, visit [MatthewsPaint.com](http://MatthewsPaint.com) > Quick Links > VOC Data

### Performance Characteristics

Volume solids (RTS)	45.28% - 54.88%
Theoretical Coverage (1 mil @ 100% transfer efficiency)	727 - 761 sq.ft./RTS gal
Application Conditions - Temperature	60°F (16°C) Minimum 100°F (38°C) Maximum
Application Conditions - Relative Humidity	85% maximum 5° above dew point

For specifications and other technical data refer to MPC211 MAP-LV specifications document

## Important:

The contents of this package may have to be blended with other components before the product can be used. Before opening the packages, be sure you understand the warning messages on the labels of all components, since the mixture will have the hazards of all its parts. Improper spray technique may result in a hazardous condition. Follow spray equipment manufacturer's instructions to prevent personal injury or fire. Follow directions for respirator use. Wear eye and skin protection. Observe all applicable precautions.

**See 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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