

Acrylic Polyurethane Ultra Low VOC Matte Clear

Matthews Acrylic Polyurethane Ultra Low VOC (MAP-LV®) MAP-LVC238/01 Matte Clear is produced from the technology that makes our colors unparalleled in their resistance to the elements.

MAP-LVC238/01 Ultra Low VOC Matte Clear is formulated with a UV screening package that ensures protection of the color and substrate underneath.

MAP-LVC238/01 Ultra Low VOC Matte Clear is designed for topcoat applications to protect color coated signage components, vinyl graphics and to highlight architectural metals.



Features:	Benefits:
Durable yet flexible film	Impact and mar resistant
Matte-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-LVC238/01 Acrylic Polyurethane Ultra Low VOC Matte Clear may be applied over properly prepared:

MAP® Satin MAP® Satin VOC MAP® MAP-LVG Acrylic Polyurethane MAP-LVS Acrylic Polyurethane 74777SP/01 Tie Bond Adhesive 274777SP/01 Tie Bond Adhesive 274793SP/01 Spray Bond Adhesive

Associated Products:

Catalyst Reducer MAP-LVX270/01* Catalyst MAP-LVRS01/01* Cool Temp. Spray Reducer MAP-LVRS02/01 Warm Temp. Spray Reducer w/ Extender *Also available in /04 MAP-LVRS03/01 Hot Temperature Spray Reducer w/ Extender 80° & Above 47117SP/04 MAP Accelerator MAP-LVRB51/01* Brush and Roll Reducer

Accelerator 287437SP/08 HS Accelerator MAP-LVA117/08 Ultra Low VOC Accelerator 287484SP/08 HS Turbo Enhancer SM166A/04 Tape-It Accelerator

MPC200

Product Information Effective 06/20

MAP-LVC238/01

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-LVC238/01 LVX270/01* LVRS0x** with Accelerator***

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

- MAP-LVRS01/01* Cool Temp. Spray Reducer
- MAP-LVRS02/01 Warm Temp. Spray Reducer with Extender
- MAP-LVRS03/01 Hot Temperature Spray Reducer with Extender 80° & Above
- NOTE: Larger jobs may require a hotter temperature reducer.
- For Brushing and Rolling, refer to Technical Data Sheet MPC193.
- All components should be mixed thoroughly before using
- Strain material after mixing
- *Also available in /04
- **Choose MAP reducer
- ***Caution: use of accelerator with LVRS01/01* is Not Recommended as it will drastically shorten pot life.



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-LVRS01/01*	Accelerator is Not F	4 hours	
	MAP-LVRS02/01 or MAP-LVRS03/01	287437SP/08	1.5 oz	1.5 hours
		MAP-LVA117/08	MAP-LVA117/08 1 oz	
		47117SP/04 1 oz		1 hour
		287484SP/08	94SP/08 ½ oz – 1 oz	
		SM166A/04	1⁄4 oz – 1 oz	30 minutes
Brush and Roll	LVRB51/01*	Accelerator	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:

• 287112SP/04 Medium Suede Additive

• 287113SP/04 Coarse Suede Additive

^{*}Also available in /04

MAP-LVC238/01

Directions for Use

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

Application:



Apply: Apply two full wet coats, allowing proper flash time* between coats.

Apply additional coats as necessary to achieve total dry film thickness. *Flash times will vary dependent upon film thickness, temperature,

solvent selection, spray gun set-up, application, etc.

Recommended Film Thickness:

Per Coat Total 2 - 3 mils 4 - 6 mils

2 mils

Wet Film Thickness (WFT) 2 - 3 mils
Dry Film Thickness (DFT) 1 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 LVC238/01 (Mixed 3:1:1 with LVX270/01* and Reducer)

Reducer	Accelerator*	Dust Free	Set to Touch	Dry to Handle	Tape Time	Vinyl Application (2-3 mils)	Reflective Metallic Vinyl Application
MAP-LVRS01/01*	Not recommended	10-15 minutes	25-35 minutes	45-60 minutes	1-2 hours	8-11 hours	16-22 hours
MAP-LVRS02/01 or MAP-LVRS03/01	287437SP/08	10-15 minutes	15-20 minutes	25-45 minutes	1-1½ hours	7-10 hours	12-16 hours
	MAP-LVA117/08	10-15 minutes	15-20 minutes	25-45 minutes	1-1½ hours	7-10 hours	12-16 hours
	47117SP/04	10-15 minutes	15-20 minutes	25-45 minutes	1-1½ hours	7-10 hours	12-16 hours
	287484SP/08	10-15 minutes	15-20 minutes	25-40 minutes	45-60 minutes	5-7 hours	9-14 hours
	SM166A/04	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.

^{*}Also available in /04

MAP-LVC238/01

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Technical Data: VOC Information

VOC Actual RTS0.18-1.91 lbs/galVOC Actual RTS22-229 g/LVOC Regulatory (less water less exempt) RTS0.38-2.34 lbs/galVOC Regulatory (less water less exempt) RTS46-280 g/L

For complete VOC information, visit 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

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 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.



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