



Acrylic Polyurethane Ultra Low VOC Satin Clear

MAP-LVC228/01

Matthews Acrylic Polyurethane Ultra Low VOC (MAP-LV®) MAP-LVC228/01 Satin Clear is produced from the technology that makes our colors unparalleled in their resistance to the elements.

MAP-LVC228/01 Ultra Low VOC Satin Clear is formulated with a UV screening package that ensures protection of the color and substrate underneath.

MAP-LVC228/01 Ultra Low VOC Satin 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
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-LVC228/01 Acrylic Polyurethane Ultra Low VOC Satin 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

MAP-LVX270/01* Catalyst
*Also available in /04

Reducer

MAP-LVRS01/01* Cool Temp. Spray Reducer
MAP-LVRS02/01 Warm Temp. Spray Reducer w/ Extender
MAP-LVRS03/01 Hot Temperature Spray Reducer w/ Extender 80° & Above
MAP-LVRB51/01* Brush and Roll Reducer

Accelerator

287437SP/08 HS Accelerator
MAP-LVA117/08 Ultra Low VOC Accelerator
47117SP/04 MAP Accelerator
287484SP/08 HS Turbo Enhancer
SM166A/04 Tape-It Accelerator

MAP-LVC228/01

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-LVC228/01 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 Recommended when using MAP-LVRS01/01* reducer		4 hours
	MAP-LVRS02/01 or MAP-LVRS03/01	287437SP/08	1.5 oz	1.5 hours
		MAP-LVA117/08	1 oz	1 hour
		47117SP/04	1 oz	1 hour
		287484SP/08	½ oz – 1 oz	1 hour
	SM166A/04	¼ oz – 1 oz	30 minutes	
Brush and Roll	LVRB51/01*	Accelerator is Not Recommended when brushing or rolling		2 hours

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

*Also available in /04

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

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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:	Wet Film Thickness (WFT)	Per Coat	Total
		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
 LVC228/01 (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.

*Also available in /04

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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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 > 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
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