



Acrylic Polyurethane Ultra Low VOC Satin Clear

MAP-LVC228

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

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

MAP-LVC228 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
	For use in areas where air spraying is prohibited

Compatible Surfaces:

MAP-LVC228 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	
74 777SP Tie Bond Adhesive	
274 777SP Tie Bond Adhesive	
274 793SP Spray Bond Adhesive	

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

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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 LVX270 LVRS0x* with Accelerator**				
	3 parts	1 part	1 part	Up to 1oz/RTS quart	
	 MAP-LVRS03 NOTE: Larger **Caution: use o shorten pot life 	Cool Temp. Warm Temp Hot Tempes jobs may re f accelerator e.	o. Spray Redu rature Spray I quire a hotter with LVRS02	eer acer with Extender Reducer with Extender 80° & Above r temperature reducer. 1 is Not Recommended as it will drastically	

- 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
	MAP-LVRS01	Not Recommended		4 hours
		287 437SP	1.5 oz	1.5 hours
Spraying	MAP-LVRS02 or	MAP-LVA117	1 oz	1 hour
		47117SP	1 oz	1 hour
	MAP-LVRS03	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:

\bigcirc	Air Pressure:	Conventional: HVLP: * Refer to spray gu	40 - 50 psi at the gun* 10 psi at the cap* n manufacturer recommendations for inlet pressure.
	Pressure Pot Fluid	Delivery:	8 - 12 Fluid Ounces per Minute
*	Gun Set Up:	Siphon Feed: HVLP: Pressure Pot:	1.2 - 1.4 mm 0.047 - 0.055 fluid tip 1.2 - 1.4 mm 0.047 - 0.055 fluid tip 1.0 - 1.2 mm 0.039 - 0.047 fluid tip

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Apply:

Directions for Use

Application:



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
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 LVC228 (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
	287 437SP	10-15 minutes	15-20 minutes	25-45 minutes	1-11/2 hours	7-10 hours	12-16 hours
MAP-LVRS02	MAP-LVA117	10-15 minutes	15-20 minutes	25-45 minutes	1-1½ hours	7-10 hours	12-16 hours
or	47117SP	10-15 minutes	15-20 minutes	25-45 minutes	1-11/2 hours	7-10 hours	12-16 hours
MAP-LVRS03	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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hnical 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 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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