

The Best of Both Worlds!



MAP[®]

ULTRA LOW VOC





MAP[®]

ULTRA LOW VOC

The Best of Both Worlds!

A benchmark high-performance polyurethane paint that limits VOC to less than 50g/L or .4172 lbs/gal while delivering superior color and durability.

- High solids formula and maximum pigment content provide better hiding and a faster film build.
- 50% more impact resistance in direct and reverse impact testing.
- 25% better gloss retention.
- Enhanced protection in corrosive environments and holds up better to extreme changes in temperature.
- All 70,000 existing color formulas are available.
- **Cost-Effective Solution**—MAP Ultra Low VOC is the cost-effective solution that will save you time and money on total cost per gallon. This new product formulation has 50%-67% solids, depending on color, resulting in better hiding and faster film build. The result is less paint being used and more efficient use of product per job.



“As a fabricator, I demand performance from my paint. As an outdoorsman, I am concerned about the impact my work has on the environment. That’s why Matthews MAP Ultra Low VOC makes so much sense. It is a benchmark high-performance polyurethane paint that limits VOC to less than 50g/L while delivering the color and durability I need.”



MAP Ultra Low VOC has less impact on the environment while providing superior performance.



Improved viscosity to flow and lay optimally.



MAP Ultra Low VOC has lower VOC levels than even some water-based paints.



MAP Ultra Low VOC mix ratio is similar to the MAP Conventional topcoats.

MAP Ultra Low VOC FAQ'S

Q Why should I use MAP Ultra Low VOC (MAP-LV)?

A In addition to MAP-LV being an environmentally friendly product, this revolutionary paint provides greater durability, gloss retention and hiding than standard acrylic polyurethane paints. Making the switch is easy with the same mix ratio, color selection and great customer service you have come to know from Matthews Paint. It really is the best of both worlds!

Q How does MAP Ultra Low VOC high solids formula compare to industry standard acrylic polyurethane VOC levels of 2.8 or 3.5 VOC?

A MAP-LV in solid colors has a VOC level, as applied, of less than 50g/L or 0.4172 lbs/gallon. This is significantly lower and more environmentally friendly than standard acrylic polyurethanes! As applied, MAP-LV metallic formulas are less than 80g/L. In addition, MAP-LV has lower VOCs than similar automotive waterborne products.

Q Is the mix ratio of MAP-LV similar to other topcoat Matthews product lines?

A The mix ratio MAP-LV is 3:1:1—the same as all existing Matthews' color lines.

Q How many toners will be available in the new MAP-LV line?

A MAP-LV uses all of the same toner bases as the MAP conventional, SVOC and VOC lines, excluding the high-hide yellow, sparkle silver and red.

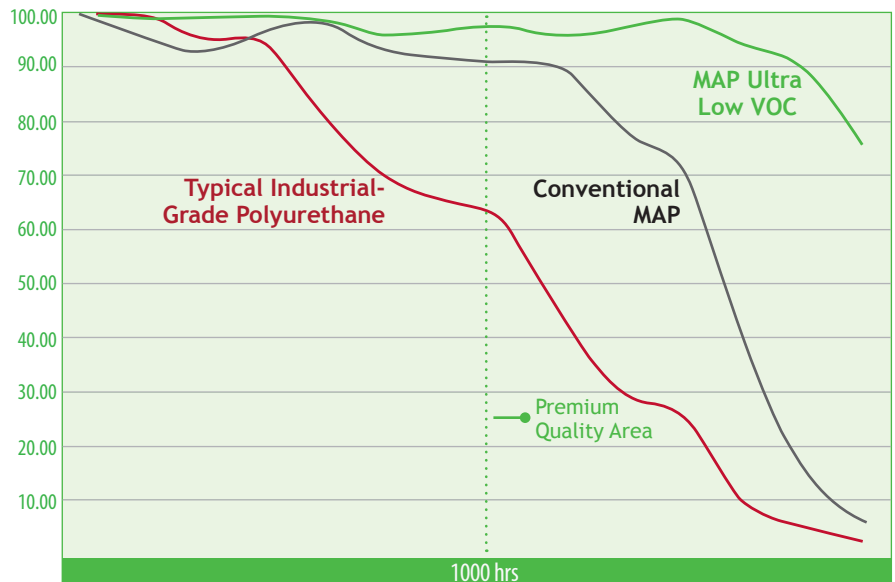
Q How does the new MAP-LV compare to the existing broad color range of the current MAP color space of over 70,000 formulas?

A All of the existing formulas will be available in the new MAP Low VOC product lines.

Q What gloss levels will be available in the new MAP-LV line?

A Both satin and gloss will be available. Gloss levels in between can easily be achieved by mixing satin with the new MAP-LVC clears.

MAP Ultra Low VOC Gloss Retention Chart



Q *How does the impact resistance compare to standard industry acrylic polyurethane products?*

A The MAP-LV product was designed to provide enhanced flexibility to the film base and has been measured to be 50% more impact resistant than other industrial-grade polyurethanes in direct and reverse impact testing. MAP-LV accommodates the expansion and contraction due to changes in the weather and has improved performance on flexible substrates.

MAP Ultra Low VOC: Improved Impact Resistance

Typical Industrial-Grade Polyurethane

75+ in/lbs.

MAP Ultra Low VOC

150+ in/lbs.

Q *Will the new MAP Ultra Low VOC have a brush and roll capability?*

A Yes! It was developed to be sprayed, brushed or rolled with no additional additives required. MAP-LV is formulated for excellent leveling in brush/roll applications for unparalleled appearance characteristics. The mix ratio for brush and rolling becomes easier than ever before with the MAP-LV.

Q *What benefits does the high solids formula provide me as a user?*

A MAP-LV, like all Matthews products, is formulated with maximum pigment volume content for the best possible hiding. The high solids product maximizes paint usage applied per pass and the combination results in excellent coverage characteristics.

Q *How does MAP Ultra Low VOC compare to typical conventional industrial-grade polyurethane in accelerated weathering tests?*

A Tests have proven MAP-LV's gloss retention to be two times better than typical conventional industrial-grade polyurethanes.

Q *What kind of field testing has been done with the new MAP Ultra Low VOC product?*

A This product has been successfully used in multiple real-world applications since September 2009.

Q *What substrate adhesion tests have been done?*

A Aluminum, Steel, Daytona Board, Styrene, Kydex, Lexan Polycarbonate and clear acrylic plexiglass. Certain plastics should be tested prior to applying. We are continuing laboratory work on additional substrates.

Q *Is MAP-LV fully compatible with all other Matthews primers?*

A MAP-LV exhibits excellent adhesion over all Matthews primers.

Q *What companion products have been developed to complement the new MAP Ultra Low VOC product line?*

A There are currently three clear coats (matte, satin & gloss), two spray reducers, a brush/roll reducer, an ultra low VOC primer and an accelerator available.



Water-Based vs. Solvent-Based Paint Myth

With the growing emphasis on protecting the environment and improving air quality, alternative paints have been coming on the market over the past few years. This has led to a well rounded choice of products from water-based to solvent-based paint.

Often customers hear the words “waterborne” or “water-based” and immediately assume these products contain no VOCs at all, which is actually not the case. Volatile Organic Compounds are the organic solvents used in standard paint formulations which serve as the carrier for paint pigment. When paint dries or begins the curing process, the odor that is detected comes from the evaporation of VOCs used in the solvent vehicle and the tinting pigments.

The new benchmark MAP-LV acrylic polyurethane paint limits VOC content to a revolutionary 50g/L or 0.4172 lbs per gallon while delivering superior color and durability. Conversely, automotive grade water-based paints contain VOC levels as high as 461g/L or 3.85 VOC lbs per gallon.

With the introduction of the new MAP-LV series, Matthews Paint continues to lead the industry with environmentally-minded products while maintaining our high standards of performance.

Call or visit our website for more information.

1.800.323.6593

www.matthewspaint.com



MAP Ultra Low VOC Product Cross Reference with MAP Chart

	MAP Ultra Low VOC Product Cross Reference with MAP Chart					
	Satin Products			Gloss Products		
	N-Series Conventional 5.4 lbs/gl	SVOC Series Low VOC 2.8/3.5 lbs/gl	LV Series Ultra Low VOC <50 g/L	SOA Series Conventional 5.4 lbs/gl	VOC Series Low VOC 2.8/3.5 lbs/gl	LV Series Ultra Low VOC <50 g/L
Toners						
White	N 202SP	SV 202SP	MAP-LVS202	SOA 202SP	VOC 202SP	MAP-LVG202
Violet	N 911SP	SV 911SP	MAP-LVS911	SOA 911SP	VOC 911SP	MAP-LVG911
Maroon	N 912SP	SV 912SP	MAP-LVS912	SOA 912SP	VOC 912SP	MAP-LVG912
Magenta	N 913SP	SV 913SP	MAP-LVS913	SOA 913SP	VOC 913SP	MAP-LVG913
Dark Red	N 914SP	SV 914SP	MAP-LVS914	SOA 914SP	VOC 914SP	MAP-LVG914
Red Oxide	N 915SP	SV 915SP	MAP-LVS915	SOA 915SP	VOC 915SP	MAP-LVG915
Yellow Oxide	N 917SP	SV 917SP	MAP-LVS917	SOA 917SP	VOC 917SP	MAP-LVG917
Blue	N 920SP	SV 920SP	MAP-LVS920	SOA 920SP	VOC 920SP	MAP-LVG920
Green	N 921SP	SV 921SP	MAP-LVS921	SOA 921SP	VOC 921SP	MAP-LVG921
Burnt Umber	N 922SP	SV 922SP	MAP-LVS922	SOA 922SP	VOC 922SP	MAP-LVG922
Black	N 923SP	SV 923SP	MAP-LVS923	SOA 923SP	VOC 923SP	MAP-LVG923
New Blue	N 925SP	SV 925SP	MAP-LVS925	SOA 925SP	VOC 925SP	MAP-LVG925
Gloss Black	N 929SP	SV 929SP	MAP-LVS929	SOA 929SP	VOC 929SP	MAP-LVG929
Light Red	N 930SP	SV 930SP	MAP-LVS930	SOA 930SP	VOC 930SP	MAP-LVG930
Transparent Red Oxide	N 931SP	SV 931SP	MAP-LVS931	SOA 931SP	VOC 931SP	MAP-LVG931
Transparent Yellow Oxide	N 932SP	SV 932SP	MAP-LVS932	SOA 932SP	VOC 932SP	MAP-LVG932
Red Yellow	N 940SP	SV 940SP	MAP-LVS940	SOA 940SP	VOC 940SP	MAP-LVG940
Green Yellow	N 942SP	SV 942SP	MAP-LVS942	SOA 942SP	VOC 942SP	MAP-LVG942
High Hide Yellow	N 943SP	SV 943SP	NA	SOA 943SP	VOC 943SP	NA
Bright Red	N 946SP	SV 946SP	NA	SOA 946SP	VOC 946SP	NA
Scarlet Red	N 947SP	SV 947SP	MAP-LVS947	SOA 947SP	VOC 947SP	MAP-LVG947
Medium Silver	N 951SP	SV 951SP	MAP-LVS951*	SOA 951SP	VOC 951SP	MAP-LVG951*
Sparkle Silver	N 952SP	SV 952SP		SOA 952SP	VOC 952SP	
Super Sparkle Silver	N 953SP	SV 953SP	MAP-LVS953*	SOA 953SP	VOC 953SP	MAP-LVG953*
Fine Silver	N 954SP	SV 954SP	MAP-LVS954*	SOA 954SP	VOC 954SP	MAP-LVG954*
Clearcoats						
Gloss Clear				42 208SP	282 208SP	MAP-LVC208
Satin Clear	42 228SP	281 228SP	MAP-LVC228			
Matte/Flat Clear	42 900SP		MAP-LVC238			
Undercoats/Primers						
White Epoxy Primer	274 908SP	274 908SP 274 228SP	MAP-LVU100 MAP-LVU100			
Tinted Polyurethane Primer			MAP-LVU200**			
Hardeners						
White Epoxy Primer Hardener	274909SP	274909SP 274 229	MAP-LVX101 MAP-LVX101			
Topcoat Hardener—Spray	43 270SP	283 320SP	MAP-LVX270	43 270SP	283 800SP	MAP-LVX270
Topcoat Hardener—Brush & Roll	43 621SP		MAP-LVX270			MAP-LVX270
Reducers						
Reducers for Spray	6379SP	6300SP	MAP-LVRS01	6379SP	6300SP	MAP-LVRS01
	45 280SP	6301SP	MAP-LVRS01	45 280SP	6301SP	MAP-LVRS01
	45 290SP	6302SP	MAP-LVRS01	45 290SP	6302SP	MAP-LVRS01
	6396SP	6370SP	MAP-LVRS01	6396SP	6370SP	MAP-LVRS01
		6371SP	MAP-LVRS01		6371SP	MAP-LVRS01
		6372SP	MAP-LVRS01		6372SP	MAP-LVRS01
Reducer for Spray w/Pot Life Extender	45 251SP		MAP-LVRS02*	45 251SP		MAP-LVRS02*
Reducers for Brush and Roll	Above +47 444SP		MAP-LVRB51	Above +47 444SP	NA	MAP-LVRB51
Reducers for Undercoat			MAP-LVRU01	Above +47 444SP	NA	MAP-LVRB51
Additives						
Accelerator	47 117SP		MAP-LVA117		287 484SP	MAP-LVA117

*Use of this product will result in a VOC level, as applied, higher than 50g/L, up to 130-170 g/L max, depending on mix.

**Product in development for future availability.



760 Pittsburgh Drive, Delaware, OH 43015
Phone: 1.800.323.6593 • Fax: 1.800.947.0377 • www.matthewspaint.com

Matthews Paint is a trademark of PPG Ohio, Inc.

MPE 1215 10/10