Matthews Acrylic Polyurethane

Gloss MAP®

MAP® (Matthews Acrylic Polyurethane) is famous for its ability to withstand exposure to extreme climatic conditions. Once cured, MAP's highly durable, chemically cross-linked coating allows most graffiti to be removed with a suitable solvent and process. This product can be applied over many properly prepared and primed substrates such as aluminum, steel, wood, or other existing coatings.

MAP has an unlimited selection of standard and custom colors that can be adjusted to a wide range of gloss levels. Color offsets to any manufacturer are also available.

Features:	Benefits:
Durable gloss finish	Adds depth and appearance
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
Brush and roll capability	For use in areas where air spraying is prohibited

Compatible Surfaces:

MAP Acrylic Polyurethane may be applied over properly prepared:

6001SP/01 Polyester Primer Surfacer
6007SP/01 3.5 Gray Epoxy Primer
274685SP/01 U Prime
274808SP/01 Black Epoxy Primer
274908SP/01 White Epoxy Primer
274528SP/01 2.1 VOC Gray Epoxy Primer
274530SP/01 2.1 VOC White Epoxy Primer
274531SP/01 2.1 VOC Black Epoxy Primer
74350SP/01 3.5 Non-Chromate Primer
74734SP/01 Metal Pretreatment
74760SP/01 PT Filler
74770SP/01 HBPT
74780SP/01 HBEF
74777SP/01 Tie Bond
274777SP/01 Low VOC Tie Bond
274793SP/01 Low VOC Spray Bond
LVU100/01 Ultra Low VOC Epoxy Primer

Associated Products:

Catalyst
43270SP/01* Universal Catalyst
43621SP/04 Brushing Catalyst
(For brush or roller application)
43999SP/01 Slow Catalyst
(For hot weather, bake application or for very large substrates)
*Also available in /04

Reducer
6379SP/01 Cool temperature, 60 - 75°F (16 - 24°C)
45280SP/01 Warm temperature, 70 - 80°F (21 - 27°C)
45290SP/01 Very warm temperature, 75 - 85°F (24 - 29°C)
6396SP/01 Hot temperature, 80°F (27°C) & above
45251SP/01 Retarder, to be blended up to 50% with reducer. Not to be used by itself.

Accelerator
287437SP/08 HS Accelerator
47117SP/04 MAP Accelerator
287484SP/08 HS Turbo Enhancer
MAP-LVA117/08 Ultra Low VOC 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	43270SP/01 or /04 43999SP/01	Reducer*	with Accelerator
3 parts	1 part	1 part	Optional**

*Choose MAP reducer

- 6379SP/01 Cool temperature, 60 - 75°F (16 - 24°C)
- 45280SP/01 Warm temperature, 70 - 80°F (21 - 27°C)
- 45290SP/01 Very warm temperature, 75 - 85°F (24 - 29°C)
- 6396SP/01 Hot temperature, 80°F (27°C) & above
- 45251SP/01 Retarder, to be blended up to 50% with reducer. Not to be used by itself.
- NOTE: Larger jobs may require a hotter temperature reducer.

**Refer to MPC218 for optional accelerators and amounts.

- For Brushing and Rolling, refer to Technical Data Sheet MPC159.
- 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	Accelerator*	Max load of accelerator per RTS qt	Pot-Life
Spraying	Without Accelerator		8 hours
	287437SP/08	1.5 oz	2 hours
	MAP-LVA117/08	1 oz	45 min
	47117SP/04	1 oz	1 hour
	287484SP/08	.5 oz	1 hour
Brush and Roll	Accelerator is Not Recommended when brushing or rolling		8 hours

*Times listed in the chart above are for a full load of accelerator. Refer to MPC218 for optional accelerators and amounts.

Additives:

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

- 47888SP/01 Flattening Paste (refer to MPC204)
- 287112SP/04 Medium Suede Additive
- 287113SP/04 Suede Additive
- 287103SP/01 Low VOC Basecoat Converter
- 47444SP/01 Brush/Roller Additive
- 47474SP/04 Flex Additive
- SOA955SP/01 Matting Clear (refer to MPC205)

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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 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)	3 - 4 mils	6 - 8 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
MAP (mixed 3:1:1 with catalyst and reducer)

Accelerator*	Dust Free	Set to Touch	Dry to Handle	Tape Time	Vinyl Application (2-3 mils)	Reflective Metallic Vinyl Application
Without Accelerator	15 minutes	30 min-1 hour	1.5-2 hours	16 hours	48 hours	96 hours
287437SP/08	15 minutes	30-45 minutes	1-1.5 hours	1 hour	24 hours	48 hours
MAP-LVA117/08	15 minutes	30-45 minutes	1-1.5 hours	45 minutes	24 hours	48 hours
47117SP/04	15 minutes	30-45 minutes	45 min-1 hour	45 minutes	24 hours	48 hours
287484SP/08	15 minutes	30-45 minutes	45 min-1 hour	2 hours	8 hours	24 hours

*Times listed in the chart above are for a full load of accelerator. Refer to MPC218 for optional accelerators and amounts.

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 lacquer thinner or equivalent cleaning solvent.
Note: Do not leave mixed material in equipment.

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Technical Data:

VOC Information

VOC Actual RTS	4.46 - 5.50 lbs/gal
VOC Actual RTS	534 - 659 g/L
VOC Regulatory (less water less exempt) RTS	4.46 - 5.49 lbs/gal
VOC Regulatory (less water less exempt) RTS	534 - 658 g/L

For complete VOC information, visit MatthewsPaint.com > Quick Links > VOC Data

Performance Characteristics

Volume solids (RTS)	25% - 31%
Theoretical Coverage (1 mil @ 100% transfer efficiency)	500 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 MPC101 MAP 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
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.
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