



MPC100

Matthews Acrylic Polyurethane

MAP[®]

MAP[®] (Matthews Acrylic Polyurethane) is famous for its ability to withstand exposure to extreme climatic conditions. MAP's highly durable, chemically cross-linked coating allows most graffiti to be easily wiped off with a suitable solvent. MAP provides excellent exterior durability over metal, wood and numerous plastics.

MAP has an unlimited selection of standard and custom colors in gloss to matte finishes. Color offsets to any manufacturer are also available.



Features:

- Extremely hard, yet flexible film
- Air dry or bake
- Great UV resistance

Benefits:

- High impact, mar and abrasion resistant
- Excellent chemical and corrosion resistance
- Fits most shop conditions
- Excellent gloss retention

Compatible Surfaces:

MAP[®] Acrylic Polyurethane may be applied over:

- | | |
|----------------------------------|--------------------------------------|
| 6001SP Polyester Primer Surfacer | 74 734SP/74 735SP Metal Pretreatment |
| 6010SP Flexible Sealer | 74 760SP/74 766SP PT Filler |
| 274 228SP E Prime White 2.8 | 74 770SP/74 766SP HBPT |
| 274 685SP/274 686SP U Prime | 74 780SP/74 781SP HBEF |
| 274 808SP Black Epoxy Primer | 74 777SP Tie Bond |
| 274 908SP White Epoxy Primer | 74 793SP Spray Bond |

Required Products:

Catalyst

- | |
|--|
| 43 270SP Universal Catalyst |
| 43 621SP Brushing Catalyst (For brush or roller application) |
| 43 999SP Slow Catalyst (For hot weather or bake application) |

Reducers (Conventional)

- | | |
|----------|--|
| 6379SP | Cool temperature, 60 - 75°F (16 - 24°C) |
| 45 280SP | Warm temperature, 70 - 80°F (21 - 27°C) |
| 45 290SP | Very warm temperature, 75 - 85°F (24 - 29°C) |
| 6396SP | Hot temperature, 80°F (27°C) & above |
| 45 251SP | Retarder |

Directions for Use

Surface Preparation:

Substrate should be prepared according to undercoat instructions prior to topcoat application.

Mix Ratio:



Mix Ratios (by volume)

MAP	MAP Catalyst*	Map Reducer**
3 parts	1 part	1 part

* Catalysts that can be used in any MAP topcoats at a 3:1:1 ratio are:

43 270SP Universal Catalyst

43 999SP Slow Catalyst (For hot weather or bake application)

NOTE: If brushing or rolling is required, 43 621SP Brushing Catalyst is recommended at a ratio of six (6) parts paint to one (1) part catalyst to two (2) parts B/R Additive 47 444SP @ (6:1:2) mix ratio.

** Choose MAP reducer best suited for shop conditions



- MAP color, catalyst and reducer should be mixed in thoroughly before using.
- Mix no more material than will be used in an 8-hour period.
- Spray viscosity should be 18 - 22 seconds (#2 Zahn cup).
- Strain material following mixing.
- Pot life of mixture is 8 hours at 70°F (21°C), or 2 hours w/ 287 437SP accelerator.

Reducers:

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6396SP	Hot temperature, 80°F (27°C) & above
45 251SP	Retarder

Additives:



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

287 437SP Accelerator	47 888SP Flattening Paste
287 112SP Medium Suede Additive	74 102SP MAP Converter
287 113SP Suede Additive	74 103SP Slow Converter
47 444SP Brush/Roller Additive	47 474SP Flex Additive
47 333SP Anti-Crater Solution	SOA 950SP Gloss Modifier
SOA 955SP Matting Clear (<i>Note:</i> This is a flattening paste and cannot be used as a topcoat)	

Spray Set Up:



Air Pressure:	Conventional:	40 - 50 psi at the gun
	HVLP:	10 psi at the cap
	Pot Pressure:	10 - 12 psi
Gun Set Up:	Siphon Feed:	1.4 mm 0.055 fluid tip
	HVLP:	1.4 mm 0.055 fluid tip
	Pressure Pot:	1.2 mm 0.046 fluid tip

Directions for Use

Application:



Apply: 1 full wet coat
Flash 5 - 10 minutes between coats
Follow with a second full wet coat
Apply additional coats as necessary to achieve total dry film thickness.

Recommended

Dry Film Thickness: 2 mils minimum (DFT)

Note: Finish with a medium to light final coat for metallic control.

Caution: All 2 component cross-linking stops or slows significantly at temperatures below 60°F or 16°C. Never spray or subject freshly painted coatings to these conditions or loss of gloss, poor water and chemical resistance, decreased durability and improper curing will occur.

Factory Pack Colors:

41 306SP	Signal Jet Black	42 215SP	Burgundy Maroon
41 312SP	Medium Bronze	42 218SP	Sundance Yellow
41 313SP	Dark Bronze	42 219SP	Capri Blue
41 314SP	Old Copper	42 259SP	Federal Green
41 335SP	Anodic Black	46 253SP	Copper
41 342SP	Brushed Aluminum	46 258SP	Gold
42 202SP	Natural White	46 400SP	Brilliant Gold over MP18645 Basecoat*
42 204SP	Gloss Black	46 401SP	Aztec Gold over MP34132 Basecoat*
42 212SP	Scarlet Red	46 402SP	Aztec Copper over MP32759 Basecoat*
42 214SP	Mexicali Red	6422SP	Gloss Hi-Hide White

*These colors require the use of a clear coat for exterior application.

Drying Times:



Air Dry (50% relative humidity, 70°F / 21°C)	Without Accelerator	With 287 437SP Accelerator
Dust Free	15 minutes	15 minutes
Tack Free	2 hours	1 hour
Tape Time	16 hours	2 - 4 hours
Dry to Handle	24 hours	4 hours
Dry to Clearcoat	30 min.	15 minutes

Bake Dry with 43 999SP Slow Catalyst

Allow 10 - 15 minutes flash before baking to prevent solvent popping

60 minutes @ 150°F / 66°C

30 minutes @ 200°F / 93°C

10 minutes @ 300°F / 149°C

Temperatures over 350° / 177°C should be avoided.

Note: Paint films cured over 24 hours should be lightly dry scuff sanded with 320 - 400 grit by hand/machine or 600 wet grit sanded before recoating to assure proper adhesion.

Equipment Cleaning:

Clean up equipment promptly with 45 340SP Cleanz-It or an all-purpose clean up solvent.
Do not leave mixed material in equipment.

Technical Data:

VOC Information

MAP	4.3 - 5.0
MAP Catalyst	5.3 - 5.8
MAP Reducer	7.3 - 8.0
Ready to Spray (3:1:1)	5.0 - 5.5

Performance Characteristics

Volume solids	33% - 43%
Volume solids (RTS)	25% - 31%
Theoretical Coverage (1 mil @ 100% transfer efficiency)	500 sq.ft./RTS gal.
Application Conditions	60°F (16°C) Minimum 100°F (38°C) Maximum
Relative Humidity	85% maximum 5° above dew point
Gloss	Matte - High
Flash Point (<i>Tag closed cup</i>)	Below 80°F (27°C)

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 Material 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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760 Pittsburgh Drive
 Delaware, OH 43015
 Toll Free: 800/323-6593
 Toll Free FAX: 800/947-0377