



MPC180

VOC Satin Clear

281 228SP

VOC Satin Clear 281 228SP is a two-component, 2.8 or 3.5 VOC acrylic polyurethane with a natural satin finish. It is produced from the same technology that makes our colors unparalleled in their resistance to the elements.

281 228SP VOC Satin Clear is formulated with a UV screening package that ensures protection of the color and substrate underneath.

281 228SP VOC Satin Clear is designed for topcoat applications to protect color-coated signage components and vinyl graphics or to highlight architectural metals.



Features:

Benefits:

- Satin-in-the-canNo additional flattening agent needed; Consistent gloss and finish; Less time to mix
- Air-dry or force-dry capable.....Fits most shop conditions
- Excellent UV resistanceExcellent color and gloss retention; Extended life cycle; Reduced maintenance costs
- 2K Acrylic polyurethaneResistance to weathering; Resistance to chalking; Long-term durability
- Brush and roll capabilityFor use in areas where air spraying is prohibited
- Low VOC technologyEnvironmentally friendly; Complies with VOC requirements; High solids

Compatible Surfaces:

281 228SP VOC Satin Clear may be applied over properly prepared:

- MAP Acrylic Polyurethane
- Satin MAP Acrylic Polyurethane
- Low VOC Satin Acrylic Polyurethane
- 74 777SP Tie Bond
- 274 777SP Low VOC Tie Bond
- 274 793SP Low VOC Spray Bond

Associated Products:

Catalyst

283 800SP

3.5 VOC Reducer

- 6300SP Cool temperature, 60 - 75°F (16 - 24°C)
- 6301SP Warm temperature, 70 - 85°F (21 - 29°C)
- 6302SP Hot temperature, 80°F (27°C) & above

2.8 VOC Reducer

- 6370SP Cool temperature, 60 - 75°F (16 - 24°C)
- 6371SP Warm temperature, 70 - 85°F (21 - 29°C)
- 6372SP Hot temperature, 80°F (27°C) & above

Accelerator

- 287 437SP HS Accelerator
- 47117SP MAP Accelerator
- 287 484SP HS Turbo Enhancer
- MAP-LVA117 Ultra Low VOC Accelerator

281 228SP

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)

| | | | |
|-----------|-----------|----------|------------------|
| 281 228SP | 283 800SP | Reducer* | with Accelerator |
| 3 parts | 1 part | 1 part | Optional** |

*Choose VOC MAP reducer

3.5 VOC Reducer

- 6300SP Cool temperature, 60 - 75°F (16 - 24°C)
- 6301SP Warm temperature, 70 - 85°F (21 - 29°C)
- 6302SP Hot temperature, 80°F (27°C) & above

2.8 VOC Reducer

- 6370SP Cool temperature, 60 - 75°F (16 - 24°C)
- 6371SP Warm temperature, 70 - 85°F (21 - 29°C)
- 6372SP Hot temperature, 80°F (27°C) & above
- 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 |
| | 287 437SP | 1.5 oz | 2 hours |
| | MAP-LVA117 | .5 oz | 45 min |
| | 47117SP | 1 oz | 1 hour |
| | 287 484SP | .5 oz | 1 hour |
| Brush and Roll | Not Recommended | | 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:

- 287 112SP Medium Suede Additive
- 287 113SP Suede Additive
- 74 103SP Low VOC Basecoat Converter
- 47 444SP Brush/Roller Additive
- 287 750SP Exempt Flattening Paste

281 228SP

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: | Wet Film Thickness (WFT) | Per Coat | Total |
|-----------------------------|--------------------------|------------|------------|
| | | 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
 281 228SP (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 |
| 287 437SP | 15 minutes | 30-45 minutes | 1-1.5 hours | 1 hour | 24 hours | 48 hours |
| MAP-LVA117 | 15 minutes | 30-45 minutes | 1-1.5 hours | 45 minutes | 24 hours | 48 hours |
| 47117SP | 15 minutes | 30-45 minutes | 45 min-1 hour | 45 minutes | 24 hours | 48 hours |
| 287 484SP | 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.

281 228SP

VOC Satin Clear

Technical Data:

3.5 VOC Information

| | |
|---|---------------------|
| VOC Actual RTS | 2.63 - 2.73 lbs/gal |
| VOC Actual RTS | 315 - 327 g/L |
| VOC Regulatory (less water less exempt) RTS | 2.93 - 3.02 lbs/gal |
| VOC Regulatory (less water less exempt) RTS | 351 - 361 g/L |

Important: to maintain 3.5 VOC compliance when using accelerators, use no more than .5oz per RTS qt of the following accelerators: 287 437SP, MAP-LVA117, 47117SP, or 287484SP.

2.8 VOC Information

| | |
|---|--------------------|
| VOC Actual RTS | 2.0 - 2.27 lbs/gal |
| VOC Actual RTS | 239 - 272 g/L |
| VOC Regulatory (less water less exempt) RTS | 2.5 - 2.8 lbs/gal |
| VOC Regulatory (less water less exempt) RTS | 299 - 335 g/L |

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

Performance Characteristics

| | |
|---|---|
| Volume solids (RTS) | 49.04 - 51.27% |
| Theoretical Coverage (1 mil @ 100% transfer efficiency) | 786 - 822 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.



The World's Finest Coating For Architectural Signage

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