



# Montana® Big Sky® Product Information Sheet

Technical Support (800) 328-4892

TDS\_BS\_SYSTEM35

## System 35™ Polyurethane 3.5 VOC Color System

READ ENTIRE PRODUCT INFORMATION SHEET PRIOR TO USE. IF ANY QUESTIONS ARISE, PLEASE CALL TECHNICAL SUPPORT.

### COMPONENTS (REQUIRED)



System 35™ Polyurethane Color  
PO35AN™/PO35AS™ Activator

### SPECIALTY COMPONENTS (OPTIONAL)

PE35ACC™ Accelerator  
CR22FEE™ Fisheye Eliminator  
TH035™/36/37 Zero VOC Reducer

### DESCRIPTION:

Our 3.5 VOC compliant high-solids single stage polyurethane is the ultimate choice for durability and excellent chemical resistance. With a deep high gloss finish, System 35™ provides excellent flow, leveling and flexibility, good color holdout, and is both impact and UV resistant – it even stands up to Skydrol®.

### PREPARATION

#### Overall or Full Panel Repair

- Prior to repair, wash the surface with mild detergent and hot water, making sure to rinse well and dry with a clean dry cloth. Solvent clean with TH5950™ Strong Wax & Grease Remover or TH5951™ Mild Wax & Grease Remover to remove any contaminants prior to sanding or bodywork.
- Make all repairs – treat bare metals and prime with appropriate Montana Products® primers and sealers.
- When using a sealer, final sand with P320 grit sandpaper or finer. When topcoating over sanded substrates, finish sand with P400 - P800 grit sandpaper.
- Final clean with TH5951™ Mild Wax & Grease Remover or TH5952™ Fast Evaporating Final Cleaner, making sure surface is clean and dry.
- Final wipe using a tack cloth prior to applying sealer or color.

### COMPATIBLE SUBSTRATES

- OEM Finishes
- Cured Aged Finishes
- EZ543™ / EZ545™ EZ-Fill™ Acrylic Primer Surfacer (sealed)
- PS3042™ / PS3044™ / PS3045™ Epoxy Prime™
- PS5008A™ / PS5009A™ Urethane Primer/Sealer
- PS5011™ / PS5012A™ / PS5015™ 2.1 VOC 2K Primer/Surfacer

*\*These substrates may be directly topcoated; however, we suggest sealing prior to color coating for optimum results. **Note:** Ensure the use of VOC compliant primers/sealers in accordance with state and local regulatory requirements.*

### MIX BY VOLUME



- 3 Parts System 35™ Color
- 1 Part PO35AN™ (normal) or PO35AS™ (slow) Activator
- Optional ½ part reduction with TH035™, TH036™ and TH037™ Zero VOC Reducer

Mix Ratio in Ounces						
Color	3	9	12	15	24	48
Activator	1	3	4	5	8	16
Reducer	0.5	1.5	2	2.5	4	8

## SPECIALTY COMPONENTS



**Accelerator** –Do not use accelerator when temperatures exceed 90°F/32°C.

- If temperatures are bordering 68°F/20°C or cooler, we strongly recommend the use of PE35ACC™ at a level of 1 – 2 ounces per ready-to-spray gallon.
- The use of PE35ACC™ will extend pot life and increase cure rate by approximately 4 hours.



**Fisheye Eliminator** – If needed, add 1 – 2 ounces of CR22FEE™ per ready-to-spray gallon (or ¼ - ½ ounce per ready-to-spray quart).

## POT LIFE



- **Note:** We suggest mixing only enough product for a single coat.
- 1 – 2 hours at 75°F/23C.
- Clean equipment immediately after use.
- **Note:** Accelerators, reducers, and temperature will affect pot life.

## EQUIPMENT SETUP



HVLP  
High Efficiency

**Fluid Tip**  
1.3 – 1.5mm  
1.3 – 1.5mm

**Air Pressure**  
8– 10 PSI at the cap  
27-32 PSI at the Gun inlet

## APPLICATION



### **As an overall or full-panel repair**

- Allow appropriate dry times for primers and sealers.
- Confirm color match is appropriate by testing color prior to application.
- Strain paint prior to application.
- Apply one medium-wet coat and allow 20 minute flash.
- Apply a 2<sup>nd</sup> full wet coat.
- If a 3<sup>rd</sup> coat is needed, for color hiding, allow 20 minute flash between 2<sup>nd</sup> and 3<sup>rd</sup> coat, and apply a light coat.
- For best results, do not apply more than 3 coats.
- If metallics are being applied, apply one fog coat immediately after last coat, holding the spray gun back an additional 2”– 3”. Raising the air pressure a few pounds will help even out metallics.

### **Blending Color**

- Use a tack cloth to final wipe repair area.
- Apply System 35™ until hiding. Apply each coat beyond prior coat, keeping within the sanded blend area. Allow proper flash between coats.
- If a clearcoat is being applied, use over full panel beyond color blend, following clearcoat directions.  
*One Gun Method (to reduce blend edge):*
  - If needed, over-reduce the pre-mixed color 2:1 – this will help extend out the color. Lowering the air pressure while choking the fluid volume can help blend color and reduce overspray.*Two Gun Method (to reduce blend edge):*
  - With a second spray gun, apply light coats of TH0885™ Reducer on the paint edge to help melt in the blend. Be sure to stay within the sanded area. Do not over-wet the edge.

## BAKING

**Note:** Do not bake color when using an accelerator.

### **Full Bake Cycle – For Heavy Buffing/Compounding or Assembly**

- Allow 10 – 5 minute purge.
- Bake 60 minutes at 145°F/62°C.
- Allow a 4 hour cool down prior to assembling or buffing

## BUFFING

**Note:** Due to variations in compounds, polishes, and buffing pads, refer to the product manufacturer for suggested use of their products. Always use a quality color coat polishing system.

### Light Polishing

For removing minor imperfections, such as fine dust, dirt, or debris. Best used for blend edges, under cured or soft fresh color.

- The use of accelerator will allow early polishing in approximately 10 – 12 hours at 75°F/23°C.
- Color may be somewhat soft. Care must be taken when doing early polishing.

### Compounding (NOT Recommended for Metallic colors)

For aggressively removing sand scratches and to flatten and level the paint surface. For use on longer air-dried or fully baked color coats.

- Air dry: 24 – 72 hours at 75°F/23°C then proceed with heavy compounding or buffing.
- Or use **Full Bake Cycle** and allow a 4 hour cool down prior to heavy compounding or buffing.
- Use P1500 grit sandpaper or finer to nib sand or to reduce orange peel. Finish sand with P2000 grit sandpaper or finer, then use a quality polishing system. Polish within the first 5 days of color application.
- Polishing Blends: Allow color to cure and dry according to recommendations. Follow with a light buff using a quality polishing system over the blend edge. Do not aggressively compound blend edges.

## RE-WORKING

- When clearcoating, do not sand System 35™ except for small spots (to remove dirt or debris). Then mist apply color coat – proceed with applying clear following the clearcoat directions.
- Allow a 24 hour cure time before re-working of clearcoated color.
- The use of a heat lamp will accelerate the cure cycle for re-repairs.
- Allow overnight cure before taping area for two-tone work.
- Re-coating may be done as soon as 16 hours or up to 72 hours without having to scuff un-accelerated System 35™.

## COMPATIBLE CLEARCOATS (OPTIONAL)

- PE35™ High Solids Polyurethane Clear

**Note: System 35™ Color may be used in conjunction with PE35™ Clear in the following two ways.**

Top coating – Properly activated PE35™ Clear may be applied directly over System 35™ Color.

- Allow solid colors to flash 20 – 30 minutes before clearcoating.
- Allow metallic colors to flash 30 – 45 minutes before clearcoating, to avoid metallic shift.
- Mix PE35™ Clear according to directions, and apply 1 coat for optimum protection.

Integrated – Properly activated PE35™ Clear may be mixed up to 100% (1:1) with pre-reduced and activated System 35™ Color – this will provide a deep, rich finish with added protection.

- Apply 2 coats of activated color, allowing appropriate flash times between coats – each coat should be hand slick before applying more color or integrated color and clear.
- Mix PE35™ according to directions, and mix with remaining pre-activated color, up to 100% (1:1).
- Apply final coat of integrated color and clear.

## SPECIAL NOTES

- Use in shop temperatures that are maintained above 75°F/23°C for the first 24 hours of the cure cycle.
- Ensure surfaces are up to shop temperature prior to work.
- Air pressure dramatically affects the lightness and darkness of metallic colors.
- System 35™ will be water resistant in 24 hours. **Note:** Do not allow raindrops to dry on a new finish for the first 3 – 4 days to prevent staining.
- If Muratic Acid is used to clean painted equipment, use a lead free formula or clearcoat to avoid staining and for additional protection.

## PHYSICAL & WEATHERING DATA

Mixed 3:1	
Dust Free	60 – 90 minutes
Dry to Handle	Overnight at 75°F/23°C
Recommended Coats	2 (3 coats for hiding only)
Solvent Resistance	MEK pass 100 rubs Xylene pass 1000 rubs
VOC as Applied	3.50 lbs/gallon (max)
DFT per Coat	Approximately 1.00 – 1.50 mils
Mixed Volume Solids	48.50 – 52.00% (dependant on color)
Theoretical Coverage	Approximately 800 square feet @ 1 mil DFT/mixed gallon
Film Hardness	2H
Impact Resistance	Forward – pass 80 in/lbs Reverse – pass 50 in/lbs
Acid Resistance: 16-hour soak	10% HCL – No Effect 5% Sulfuric – No Effect 42.5% Phosphoric – No Effect
Skydrol: 24-hour submersion	500 B-4 – No Effect

## WEATHERING DATA

Gloss Meter Angle	Initial Gloss	1725 Hours QUV Exposure	1 Year Florida Black Box
20°	88.00	85.60	73.00
60°	94.00	94.00	90.00

## CLEAN-UP

Clean spray equipment immediately following application with a quality thinner or spray gun cleaner.

## DISPOSAL

Dispose of all paint and paint related materials in accordance with state and local regulations.

## SAFETY & HEALTH

Read and follow all technical product information, labels, and SDS prior to application. Keep product out of reach of children and animals. Always wear proper safety equipment (respirator, gloves, eye, and clothing protection) when using this product.

## COMPANY INFORMATION

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