



Big Sky® Product Information Sheet

Technical Support (800) 328-4892

P.I. Sheet #1034

System 28™ Polyurethane 2.8 VOC Color System

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

COMPONENTS (REQUIRED)



1. System 28™ Polyurethane Color
2. PO28AN™ Activator

SPECIALTY COMPONENTS (OPTIONAL)

1. PE35ACC™ Accelerator (35ACC-P)
2. CR22FEE™ Fisheye Eliminator
3. PO35XSAG™ High Build Additive
4. TH028™ or TH035™ Low VOC Reducer

DESCRIPTION:

This 2.8 VOC compliant single stage polyurethane is the ultimate choice for durability and excellent chemical resistance in the strictest VOC regulated areas. With a deep glamorous finish, it offers superior high gloss, excellent flow, optimal UV protection, and is flexible and impact resistant.

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 Big Sky® primers and sealers.
- When using a sealer, final sand with 320 grit sandpaper or finer. When topcoating over sanded substrates, finish sand with 400-800 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.

Blend Repair Area

- **Note:** System 28™ is designed for overall refinishing, but may be blended in some cases.
- Detergent wash, solvent clean, and thoroughly sand past the blend area using 1500 – 2000 grit sandpaper. The use of a gray nylon scuff pad or scuff gel is also acceptable.
- Make necessary repairs following product directions.
- Re-clean using TH5952™ Fast Evaporating Final Cleaner before applying color.
- Final wipe using a tack cloth prior to applying sealer or color.

COMPATIBLE SUBSTRATES

- OEM Finishes
- Cured Aged Finishes
- EZ543™ EZ-Fill™ Acrylic Primer Surfacer (sealed)
- PS3042™/3044™/3045™ Epoxy Prime™
- PS5008™/5009™ Urethane Primer/Sealer
- PS5012™ 2.1 VOC 2K Primer/Surfacer
- SA5620™ Aerosol Etch 1K Metal Etch Primer
- SFE1121™/1122™ 2.1 VOC Epic Prime™

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 28™ Color
- 1 Part PO28AN™ Activator
- Optional ½ part reduction with TH028™ or TH035™ Low 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 – If needed, use 1 – 2 ounces of PE35ACC™ Accelerator per ready-to-spray gallon (or ¼ - ½ ounce per ready-to-spray quart).

- Do not use accelerator when temperatures exceed 90°F.
- Over acceleration can cause solvent popping and brittle paint.
- Do not use accelerator if baking.
- If temperatures are bordering 68°F 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).

- Only use Montana's CR22FEE™ Fisheye Eliminator. Other brands may be incompatible.
- Overuse may cause sagging or loss of gloss.

Note: Fisheyes are usually caused by:

- Improper cleaning of substrate.
- Air compressor lines – drain compressor regularly and consider an air line dryer.
- Usage of WD-40 or Armorall type products around work area.
- Diesel or fuel oil equipment fallout.

High Build Additive – Use 2 – 3 ounces of PO35XSAG™ High Build Additive per ready-to-spray gallon.

- This additive is designed to resist paint sagging around areas such as rivets and sharp corners.
- The use of PO35XSAG™ will create some orange peel – extra reduction, using TH035™ Low VOC Reducer may be desired.

POT LIFE



- **Note:** We suggest mixing only enough product for a single coat.
- 1 – 2 hours at 75°F.
- Do not try to thin color after thickening has occurred – do not use.
- Clean equipment immediately after use.
- **Note:** Accelerators, reducers, and temperature will affect pot life.

EQUIPMENT SETUP



	Fluid Tip	Air Pressure
HVLP Gravity	1.3 – 1.5mm	6 – 10 PSI at the cap
HVLP Siphon	1.3 – 1.6mm	6 – 10 PSI at the cap
Conventional Gravity	1.3 – 1.5mm	45 – 55 PSI at the gun
Conventional Siphon	1.3 – 1.6mm	45 – 55 PSI at the gun

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-minutes flash or until surface is hand slick.
- Apply a 2nd full wet coat.

- If a 3rd coat is needed, for color hiding, allow 20-minutes flash between 2nd and 3rd 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 28™ until hiding. Apply each coat beyond prior coat, keeping within the sanded blend area. Allow proper flash between coats.
- 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 blending solvent, CR22RS™, or 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 – 15 minutes purge.
- Bake 60-minutes at 145°F.
- 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.
- Color may be somewhat soft. Care must be taken when doing early polishing.

Compounding

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 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 1500 grit sandpaper or finer to nib sand or to reduce orange peel. Finish sand with 2000 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

- Allow a 24-hour cure time before re-working of 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 unaccelerated System 28™.

SPECIAL NOTES

- Use in shop temperatures that are maintained above 75°F for the first 24-hours of the cure cycle.
- Ensure surfaces are up to shop temperature prior to work.
- Ensure proper metal conditioning/preparation procedures in early stages are followed.
- Use a mixing cup for accurate volume measurements.

- Air pressure dramatically affects the lightness and darkness of metallic colors.
- System 28™ 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
Recommended Coats	2 (3 coats for hiding only)
Solvent Resistance	MEK pass 100 rubs Xylene pass 1000 rubs
VOC as Applied	2.80 lbs/gallon (max)
DFT per Coat	1.00 – 1.50 mils
Mixed Volume Solids	48.50 – 51.00% (dependant on color)
Theoretical Coverage	Approximately 804 square feet @ 1 mil DFT/mixed gallon
Film Hardness	2H
Impact Resistance	Forward – 80 in/lbs Reverse – 50 in/lbs
Acid Resistance: 16-Hour Soak	10% HCL - No Effect 5% Sulfuric - No Effect 42.5% Phosphoric - No Effect

WEATHERING DATA

Gloss Meter Angle	Initial Gloss	1000 Hours QUV Exposure	1725 Hours QUV Exposure
20°	88.00	86.90	85.60
60°	94.00	94.20	94.00

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 MSDS 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.

MSDS REFERENCE

Color – MSDS #18 (no lead)
MSDS #19 (lead)
Activator – MSDS#6
Reducer – MSDS #1
Additive – MSDS #8

COMPANY INFORMATION

ChemSpec USA
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Toll Free: (800) 328-4892
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Website: www.chemspec.co.za
www.montanabigsky.com

Refer to all labels on products and information sheets for hazards and proper handling procedures for each component. Read the Material Safety Data Sheets (MSDS) supplied with the materials.

KEEP OUT OF REACH OF CHILDREN