Montana Big Sky™ System 21 Acrylic Urethane Color System

COMPONENTS	System 21 Color CRV21 Series Hardeners TH03X Series Zero VOC Urethane Reducer
APPLICATION	1 medium wet coat + 1 - 2 full wet coat 15-minute flash between coats; if 3rd coat, 20-minute flash between coats
MIX RATIO	4 : 1 : 1
DRY TIME	Dust Free – 15 - 20 minutes To Handle –16 – 20 hours
VISCOSITY	N/A
VOC	419 grams / liter 3.50 lbs / gallon

GENERAL

DESCRIPTION

Montana Big Sky System 21 is a user friendly 3.5 lbs/gal VOC single-stage acrylic urethane coating designed to provide a rich, high gloss finish with excellent durability and chemical resistance. System 21 is fast drying and user friendly – a popular choice among automotive refinishers.

COMPATIBLE SUBSTRATES

- Sanded OEM Finishes
- Cured Aged Finishes
- 2.1 VOC Montana Big Sky Primers

Note: These substrates may be directly topcoated: however, we suggest sealing prior to color coating for optimum results.

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.

MIXING

COMPONENTS

Mix 4 parts System 21 Color to 1 part CRV21 Hardener Series to 1 part TH03X Series Zero VOC Urethane Reducer.

Component	Volume
Montana Big Sky System 21 Color	4
Montana Big Sky CRV21 Hardener Series	1
Montana Big Sky TH3X Series Zero VOC Urethane Reducer	1

HARDENER SELECTION

- CRV21AF Fast 63-75°F / 17-23°C
- CRV21AM Normal 75-85°F / 23-29°C
- CRV21AS Slow 85°F + / 29°C +

REDUCER SELECTION

- TH035 Fast 65-70°F / 18-21°C
- TH036 Medium 70-85°F / 21-29°C
- TH037 Slow 85°F + / 29°C +

SPECIALTY COMPONENTS (OPTIONAL)

- CR22ACC Accelerator
- CR22FEE Fisheye Eliminator

Accelerator: If needed, use 1 – 2 ounces of CR22ACC Accelerator per ready-to-spray gallon (or ¼ - ½ ounce per ready-to-spray quart). Do not use accelerator when temperature exceeds 90°F/32°C. Over acceleration can cause solvent popping and brittle paint. Do not use accelerator if baking. If temperatures are bordering 68°F/20°C or cooler, we strongly recommend the use of CR22ACC at a level of 1 – 2 ounces per ready-to-spray gallon

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 CR22FEE Fisheye Eliminator as other brands may be incompatible.

POT LIFE

4 - 6 hours @75°F/23°C
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.

APPLICATION

APPLICATION EQUIPMENT

HVLP Gravity	1.3 - 1.4 mm	8 – 10 PSI	*At the cap
High Efficiency	1.3 - 1.4 mm	27 - 32 PSI	At gauge

NOTE: Refer to spray gun manufacturer for further information regarding HVLP Inlet Pressures.

SURFACE 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. Clean with TH5953 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 TH5953 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 21 is designed for overall refinishing but may be blended in some cases. Detergent wash, solvent clean, and thoroughly sand past the blend area using P1500 – P2000 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 TH5953 Cleaner before applying color. Final wipe using a tack cloth prior to applying sealer or color.

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 15 minute flash or until surface is hand slick. Apply a 2nd full wet coat.
If a 3rd coat is needed, allow 20-minute 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.

BUFFING

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

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-hours at 75°F/23°C then proceed with heavy compounding or buffing. Or use Full Bake Cycle and allow a 1 – 2 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. Note: Buff or polish within the first 2-days for easiest results.

COMPATIBLE CLEARCOAT (OPTIONAL)

CRV21 Acrylic Urethane Universal Clear - Note: System 21 Color may be used in conjunction with CRV21 Clear in the following two ways.
Topcoating – Properly activated CRV21 Clear may be applied directly over System 21 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 CRV21 Clear according to directions, and apply 2-coats for optimum protection. Allow each coat to flash properly – each coat should be hand slick before applying the next coat of clear.

Integrated – Properly activated CRV21Clear may be mixed up to 100% (1:1) with pre-reduced and activated System 21 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 CRV21 according to directions, and mix with remaining pre-activated and reduced color, up to 100% (1:1). Apply final coat of integrated color and clear.

RECOATABILITY

When clearcoating, do not sand System 21. 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 can be done as soon as 16-hours or up to 72 hours without having to scuff unaccelerated System 21.

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. Use a mixing cup for accurate volume measurements. Air pressure dramatically affects the lightness and darkness of metallic colors. System 21 will be water resistant in 24 hours. Do not allow raindrops to dry on a new finish for the first 3 – 4 days to prevent staining. If Muriatic Acid is used to clean painted equipment, use a lead free formula or clearcoat to avoid staining and for additional protection.

DRY TIMES

AIR DRY

@ 75°F/23°C

Dust Free	15 – 20 minutes
Dry to Handle	16 – 20 hours
To Buff/Compound	Overnight
Cure	7 days

FORCE DRY

System 21 must be catalyzed in order to bake or force dry. Bake 45 minutes at 140°F/60°C (30-minutes at 150°F/66°C). Allow a 20-minute purge. Allow a 1-2-hour cool down.

PHYSICAL PROPERTIES

Direct Impact	80 ft/lbs
Reverse Impact	50 ft/lbs
Solvent Resistance	MEK pass 100 rubs; Xylene pass 100 rubs
Chemical Resistance	HCL 10% - No Effect Sulfuric 5% - No Effect Phosphoric 42.5% - No Effect
RTS VOC	3.50 lbs/gallon (max)
RTS Volume Solids	30.60 – 32.50%
Theoretical Coverage	492 – 544 Sq. Ft.
Film Hardness	2H
DFT per Coat	.60 – 1.00 mil
Flash Point	See SDS

STORAGE CONDITIONS

Store in a dry, well ventilated area. Storage temperatures should be between -30°F (-34°C) and 120°F (48°C).

VOC REGULATED AREAS

VOC as Applied	419 grams/liter | 3.50 lbs/gallon

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and SDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

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In the United States and Canada:
1.855.6.AXALTA
montanabigsky.us