



Big Sky® Product Information Sheet

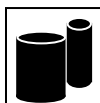
Technical Support (800) 328-4892

P.I. Sheet #1066

CRV21™ Crystal Clear 2.1 VOC Universal Clearcoat

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

COMPONENTS (REQUIRED)



1. CRV21™ Clear
2. CRV21AM™/CRV21AS™ Activator

SPECIALTY COMPONENTS (OPTIONAL)

1. CR22ACC™ Accelerator
2. CR22FEE™ Fisheye Eliminator
3. TH028™ or TH035™ Low VOC Reducer
4. TH01000™ EDGE BLENDER

DESCRIPTION:

This 2.1 VOC medium solids universal clearcoat provides excellent flow and leveling, rich gloss, and good durability and chemical resistance. CRV21™ Acrylic Urethane Clear offers excellent UV protection, has great next day buffability, and meets the strictest VOC regulations.

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 a 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 240 - 320 grit sandpaper. When topcoating over sanded substrates, finish sand with 400-800 grit sandpaper.
- Final clean with a wax & grease remover, making sure surface is clean and dry.
- Final wipe using a tack cloth prior to applying sealer or color.
- Apply color and allow appropriate dry times of basecoat or single stage color prior to clearcoating.

Blend Repair Area

Full panel clearcoating is best, however, when blending on areas such as sail panels, window posts, or cut-off areas, the following procedures can be used.

- 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 recommended.
- Make necessary repairs following product directions.
- Re-clean using a wax & grease remover before applying color and clear.
- Apply color coat and blend as needed. Allow color to properly flash before applying clear.

COMPATIBLE SUBSTRATES

- | | |
|---|--|
| • Big Sky® System 50™ SkyBase® Basecoat | • Sherwin-Williams® Ultra 7000 Basecoat® |
| • BASF R-M® Diamont® Basecoat | • Sikkens® Autocryl® Base |
| • DuPont™ ChromaBase® Basecoat | • Spies Hecker® Permacron® |
| • DuPont™ ChromaPremier® Basecoat | |
| • Martin Senour® TEC® Base | |
| • PPG® Concept DBC® | |
| • PPG® Deltron DBU® | |
| • PPG® Omni® AU Basecoat | |

- Valspar Basecoat
- **Do not use over lacquer**

MIX BY VOLUME



- 4 Parts CRV21™ Clear
- 1 Part CRV21AM™, CRV21AS™ Activator (see chart for proper activator selection)

Mix Ratio in Ounces						
Clear	4	8	16	24	32	48
Activator	1	2	4	6	8	12

Proper Activator Selection	
CRV21AM™ Normal	63 – 80°F
CRV21AS™ Slow	75 - 95°F

SPECIALTY COMPONENTS



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 temperatures exceed 90°F.
- Over acceleration can cause solvent popping and brittle paint.
- If temperatures are bordering 68°F 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 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.

POT LIFE



- 2 – 3 hours at 75°F.
- Do not try to thin clear 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 – 1.4mm	6 – 10 PSI at the cap
HVLP Siphon	1.5 – 1.6mm	6 – 10 PSI at the cap
High Efficiency Gravity	1.3 – 1.4mm	35 – 45 (PSI) Inlet Pressure
High Efficiency Siphon	1.5 – 1.6mm	35 – 45 (PSI) Inlet Pressure

APPLICATION

As an overall or full-panel clearcoat

- Allow basecoat to dry for 30-minutes or longer if manufacturer suggests longer dry times. Single stage colors may require longer flash times, usually 1 – 1 ½ hours longer.
- Apply one medium-wet coat and allow 15-minutes flash.
- Apply a 2nd full wet coat.
- A 3rd coat may be applied if extensive sanding and polishing is anticipated.
- Do not apply more clear after 1-hour of applying previous coats of clear.

Blending Clearcoat

Clearcoating an entire panel is best, however, when blending on areas such as sail panels, window posts, or cut-off areas, the following procedures can be used.

Complete Panel Clearcoating Over a Color Blend

- Apply one medium to full wet coat of clear just past the blended color.
- Allow 5 – 10 minutes flash, then apply a 2nd full wet coat of clear over the entire panel.

Panel and Clear Edge Blending *Two Gun Method (to reduce blend edge):*

- Apply one medium to full wet coat of clear, extending just beyond the color coat, while staying within the sanded blend area.
- Allow 10 – 15 minutes flash, then apply a 2nd full wet coat of clear, tapering it beyond the first coat, while staying within the sanded blend area.
- Preset a second spray gun containing a blending solvent at slightly lower air pressure than used during application of clear.
- Immediately after applying the last coat of clear, melt the blend by applying 1–2 light to medium coats of the blending solvent directly over the blend edge.
- Work the solvent into the blend. Apply just enough to sufficiently melt in the edge.
- Do not flood the edge. Do not apply more solvent than needed to melt the edge.

BAKING

Note: Do not bake clear when using accelerator.

Full Bake Cycle – For Heavy Buffing/Compounding or Assembly

- No purge time is necessary.
- Bake 35 – 45 minutes at 140°F.
- Allow a 1 – 2 hour cool down prior to assembling or buffing.
- Do not bake basecoat prior to clearing – adhesion loss between color and clear may occur.

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 clearcoat 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 clear.

- Air dry: 8 – 10 hours at 75°F.
- Three (3) coats may slow this down.
- Clear may be somewhat soft. Care must be taken when doing early polishing.
- The use of accelerator will allow early polishing in approximately 6 – 8 hours at 75°F.

Compounding

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

- Air dry: Overnight at 75°F 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 clear application.
- Polishing Blends: Allow clear 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 within 2-days for easier results.

RE-WORKING

- Due to the strength of some reducers, care needs to be taken if new color coat is going to be applied over fresh clear.
- Allow clear to dry overnight at 75°F prior to reapplying color coat. If a full break through of clear is done while making a repair, lightly apply color using a faster flashing reducer.
- In temperatures below 75°F, the use of a heat lamp will help cure the break through edge so lifting will be minimized.
- Re-clearing may be done as soon as 16-hours or up to 72-hours without having to scuff clear.
- If clear is in the first 30-45 minutes of dry time, and color needs to be sprayed due to metallic shift or inadequate hiding, apply a light coat of color to achieve desired hide, then re-clear. Avoid excessive film builds.

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.
- Use a mixing cup for accurate volume measurements.
- CRV21™ 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.
- Urethane coatings take 5 – 7 days to properly cure. Care should be taken during first week of washing. Do not use a pressure washer on fresh clear.
- Stain free body filler is recommended for use under light colors.
- Do not use over lacquer.

PHYSICAL & WEATHERING DATA

Mixed 4:1	
Dust Free	Approximately 15 – 20 minutes
Dry to Polish	10-hours at 75°F
Dry to Buff/Compound	Overnight at 75°F
Cure	7-days at 75°F
Direct Impact	+ 80 ft/lbs
Reverse Impact	50 ft/lbs
Chemical Resistance	MEK pass 100 double rubs Xylene pass 1000 rubs
RTS VOC	2.00 lbs/gallon
RTS Volume Solids	34.30%
RTS Weight Solids	35.20%
DFT per Coat	1.10 ± .20
Flash Point	See MSDS

WEATHERING DATA

Gloss Meter Angle	Initial Gloss	1500 Hours QUV Exposure
20°	89.00	82.00
60°	94.00	89.00

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

Clear – MSDS #5
Activator – MSDS#6
Reducer – MSDS #1

COMPANY INFORMATION

ChemSpec USA
9287 Smucker Road
Orrville, Ohio 44667
Toll Free: (800) 328-4892
Fax: (330) 669-3965
Website: www.chemspecpaint.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