



Big Sky® Product Information Sheet

Technical Support (800) 328-4892

P.I. SHEET #1069

PE1900™ LightSpeed™ Spot & Panel Clear – 4.2 VOC

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

COMPONENTS



PE1900™ Fast Set Spot & Panel Clear
 MP1965™/MP1975™
 MP1985™/MP1995™ Activators

SPECIALTY COMPONENTS

CR22ACC™ Accelerator
 CR22FEE™ Fisheye Eliminator

DESCRIPTION:

LightSpeed™ Clearcoat was designed for spot and panel application over properly applied basecoat color. This two component clear has fast setting dust free times and delivers outstanding gloss with low overspray. PE1900™ LightSpeed™ clear increases productivity by maximizing vehicle throughput and may be polished as soon as two hours.

PREPARATION

PE1900™ LightSpeed™ CLEAR IS DESIGNED TO BE APPLIED OVER BASECOAT COLOR

- Prior to repairs, wash the surface with mild detergent and warm water, making sure to rinse well and dry with a clean dry cloth. Solvent clean to remove any contaminants before sanding or bodywork.
- Make all repairs – treat bare metal and prime with appropriate Montana Products primer and sealer.
- When using a sealer, final sand with P400 grit sandpaper or finer before applying sealer. When topcoating directly over sanded substrates, finish sand with P600-P1000 grit sandpaper.
- On blend areas, sand the outer most intended blend area using P1500 or finer grit sandpaper, or use a white or gray scuff pad and scuff gel.

Note: Be sure to thoroughly rinse and clean surfaces after using scuff gels.

- Final clean with TH5951™ Mild Wax & Grease Remover, TH5952™ Fast Evaporating Final Cleaner or TH5953™ Zero VOC Waterborne Surface Cleaner, making sure surface is clean and dry.
- Final wipe using a tack cloth before applying sealer or color.
- Apply topcoats allowing for the appropriate dry times of undercoats and topcoat color prior to clearcoating.

SUBSTRATES

- Refinish basecoat color
 - Cured aged refinishes
 - OEM B/C and Enamel Finishes
- ** **Do Not** use over lacquer topcoat color

MIX BY VOLUME



- 4 Parts PE1900™ Clear
- 1 Part Activator (see chart for proper activator selection)

Note: We recommend using activators within 14 days of opening to maintain maximum performance. Replace lids on all paint products immediately after use to avoid moisture or oxygen contamination.

Activator	Spot Repair	Panel Repair	Multi-Panel
MP1965™ Fast	63 – 88°F	63 - 75°F	N/A
MP1975™ Medium	75 - 85°F	75 - 85°F	75 - 85°F
MP1985™ Slow	85°F +	95°F +	95°F +
MP1995™ XSlow	90°F +	100°F +	100°F +

SPECIALTY COMPONENTS



Accelerator – Not recommended except for use in cool temperatures.

- Do not use accelerator if baking.

If temperatures are bordering 68°F/20°C or cooler, CR22ACC™ may be added at a level of 1 ounce per ready-to-spray gallon (or ¼ ounce per ready-to-spray quart).



Fisheye Eliminator – Only 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 not be compatible.
- Overuse may cause sagging, loss of gloss or orange peel.

POT LIFE



- 2 – 3 hours at 75° F/23°C.
- Do not try to thin clear after thickening has occurred – do not use if starting to gel.
- 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 – 8 PSI at the cap
HVLP Siphon	1.4 – 1.6mm	6 – 8 PSI at the cap
High Efficiency Gravity	1.3 – 1.4mm	30 – 40 (PSI) Inlet Pressure
High Efficiency Siphon	1.4 – 1.6mm	30 – 40 (PSI) Inlet Pressure
Conventional Gravity	1.4 – 1.6mm	25 – 35 (PSI) Inlet Pressure
Conventional Siphon	1.5 – 1.7mm	25 – 35 (PSI) Inlet Pressure

Note: *These are starting points for spray gun recommendations. Refer to spray gun manufacturers recommendations for proper setup and operation. Additional adjustments may be necessary*

APPLICATION



- Allow basecoat to properly dry according to suggested dry times and spray conditions.
- Apply one medium to full wet coat of clear and allow 5–10 minutes flash or until surface is hand slick.
- Apply a second coat of clear. A 3rd coat may be applied after 5–10 minutes flash to increase depth or if extensive sanding and polishing is anticipated. More coats will extend dry and polishing times.
- Do not apply more clear after 1-hour of applying previous coats of clear.

Blending Clearcoat

Note: *CLEARCOATING AN ENTIRE PANEL IS REQUIRED FOR ALL WARRANTY REPAIRS.*

Complete Panel Clearcoating Over a Color Blend

Option one: Apply one medium to full wet coat of clear just past the blended color.

Allow 10 – 15 minutes flash, and then apply a 2nd full wet coat of clear over the entire panel.

Option Two: Apply one medium to full wet coat of clear on the entire panel.

Allow 10 – 15 minutes flash, and then apply a 2nd full wet coat of clear over the entire panel.

Note: A third coat of clear may be applied with either method to increase depth and DOI, or if extensive sanding and polishing is anticipated. Clear depth may affect color match to adjacent panels.

Clear Edge Blending

√ **Tech Tip:** The art of blending color or clear requires practice. When blending clear is absolutely necessary, consider the following suggested methods.

- Look for areas to hide the blend such as door posts, sail panels or sharp corners and edges.
- Keep spot repairs as tight as possible and predetermine a good cut off point.
- Tack rag the panel between applications of basecoat. If a tack rag is used after the final coat of basecoat is blended, be sure to wipe the panel completely and thoroughly to avoid leaving dry overspray streaks.
- Clean and polish well past the intended blend area and all adjacent panels to the repair in order to achieve the best color match evaluation.

- Apply one medium to full wet coat of clear, extending just beyond the color coat, while staying within the prepared 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 prepared blend area.
- After the final coat of clear is applied, over-reduce the clear by mixing 1 part TH01000™ Edge Blender™ or urethane reducer, and continue to extend the blend edge. If needed, further reduce the material and continue to extend the blend edge until finished.
- A light coat of TH01000™ Edge Blender™ or urethane reducer may be applied to finish melting-in the clear edge.
- Finish the last coat within the prepared blend area.
- Reduce air pressure and work the solvent into the blend edge.
- Do not flood the blend edge with solvent. Do not apply more solvent than needed to melt the blend 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 30 – 40 minutes at 120°F/48°C.
- Allow a 1 – 2 hour cool down prior to assembling or buffing.

Short Bake – To Quick Set Clear/Fast out of Dust

- No purge time is necessary, bake 15 – 20 minutes at 120°F/48°C.
- Allow clear to continue to air dry 8-10 hours at 75° F/23°C before polishing or compounding.

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. Excessive clear films, slower activators or cooler temperatures will result in extended dry time before polishing or compounding.

√ **Tech Tip:** Use P2000 grit sandpaper or finer to nib sand dust or dirt and to reduce orange peel. For best results, finish sand with the finest grade paper possible to minimize scratches and improve polishing. When polishing blends allow clear to dry and cure according to recommendations. Follow with a light buff using a quality polishing system over the blend edge. Do not aggressively compound blend edges.

Light Polishing Dry Time

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

- Air dry: 2 - 3 hours at 75° F/23°C.

Compounding Dry Time

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:** 6 - 8 hours at 75° F/23°C then proceed with heavy compounding and polishing.
- **Full Bake** allow cool a down for 1 - 2 hours prior to heavy compounding or polishing.

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/23°C 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. It may be necessary to create a barrier using a catalyzed primer to avoid lifting on the repair edge.
- In temperatures below 75° F/23°C, 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. Due to the strength of some reducers, care needs to be taken if a new color-coat is going to be applied over fresh clear.

PERFORMANCE TIPS

- Shop and surface temperatures should be maintained at or above 75°F/23°C for the first 24-hours of the cure cycle. Cooler temperatures may result in slower drying, curing and overall performance.
- Do not bake basecoat prior to clearing – adhesion loss may occur between basecoat and clear.
- If clear is applied in excessive amounts or applied too quickly, proper drying and curing may be compromised.

- A minimum of 1.8 to 2.0 mils of clear after buffing is required for durability and paint film integrity.
- Use a mixing cup for accurate volume measurements.
- Clear will be water resistant in 24-hours. **Note:** Do not allow raindrops to dry on any new finish for the first 3 – 4 days to prevent staining.
- Urethane coatings take 5 – 7 days at 75° F/23°C to properly cure. Care should be taken during first week of washing. Do not use a pressure washer on fresh clear. DO Not wax or seal for 60 days.
- Exercise caution when placing vehicles in direct intense sunlight shortly after applying color or clear.

DATA

PE1900™ LightSpeed™ CLEAR MIXED 4:1 USING MP1975™ @ 75° F / 23°C			
Mixing by Volume:	Clear : Activator	Dry Time to Polish:	2 hours
RTS VOC:	4.23 lbs/gallon max	Dry Time to Compound:	6 – 8 hours
RTS Weight Solids:	38.10%	Direct Impact:	50 ft/lbs
RTS Volume Solids:	32.00%	Reverse Impact:	25 ft/lbs
Avg. Time to Hand Slick:	3-5 minutes	Cure:	7-days
Avg. Dust Free Time:	8-10 minutes	Chemical Resistance:	MEK pass 100 double rubs
Avg. DFT per Coat:	1.0 mil ± .20		Xylene pass 100 rubs
Recommended Total DFT:	2.0-2.3	Flash Point:	See MSDS

WEATHERING DATA

Gloss Meter Angle	Initial Gloss	2100 Hours QUV Exposure
20°	87.20	85.40
60°	94.20	92.00

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

COMPANY INFORMATION

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