



CC-221LV

2K PREMIUM LOW VOC 2:1 VHS URETHANE CLEAR COAT

TECHNICAL DATA SHEET

I. COMPONENTS

- CC-221LV PREMIUM LOW VHS URETHANE CLEAR COAT
 - CC-22LVS SLOW 2:1 ACTIVATOR
 - CC-22LVM MEDIUM 2:1 ACTIVATOR
 - CC-22LVF FAST 2:1 ACTIVATOR
 - CB-018 ACCELERATOR
 - CB-013 SUPER SLOW REDUCER (HIGH TEMP.)

II. SAFETY CONSIDERATIONS

Contents are flammable. Keep away from heat, sparks and flame. Product is intended for professional use only. Use suitable protection. The use of an air supply respirator, gloves and a paint suit are recommended. This product is intended for use under controlled conditions: Adequate ventilation is required to prevent vapor build up. Please refer to our Safety Data Sheet (SDS) for complete safety information.

III. CC-221- APPLICATION & MIXING CHARTS

Spray Settings

 Gun Settings	<u>Fluid Tip (HVLP)</u>	1.3-1.4 mm
	<u>Pressure (HVLP)</u>	<10 psi @ air cap
	<u>Gravity Feed Tip</u>	1.3 -1.6 mm
	<u>Pressure(Gravity Feed)</u>	<10 psi @ air cap

Mixing Ratio







A= CC-221LV Clear Coat	A:B:C VHS Spray	A:B:C MS Spray
 B=CC 22LV M/F/S Activator	 	
C= LOW VOC Urethane Grade Reducer	2:1:0	2:1:1

Mixing Ratio Guidelines


CC-221LV can be reduced up to 2:1:1 as a medium solids clear. At a 2:1:1 mixture, CC-221LV has a 36% sprayable solids content. For a High Solids application, you can reduce CC-221LV to 2:1:1/2 for a sprayable solids content of ~41%. All three ratios are available to offer the optimal mixing ratio for the painter. To comply with the regulations of all 50 States

and Canada, use only LOW or 0 VOC reducer when reducing CC-221LV.



Application Times



Times	Air Dry 75°F(24°C)	Force Dry 135°F(57°C)	Times	Air Dry 75°F(24°C)	Force Dry 135°F(57°C)
Flash Times 	10-15 min. Between coats	10-15 min. Between Coats (Allow flash time before bake)	Dry to Deliver 	5-10 Hours (<i>Depends on Film Weight</i>)	30-35 min. Allow 45 min. cooldown
Dust Free Times 	45-60 min.	30 min.	Recoat Time 	Additional Coats can be added until dust-free time (45-60 min.)	Sanding is required after curing when recoating
Dry to Polish 	5-10 Hours (<i>Depends on Film Weight</i>)	30 min. Allow 45 min. cooldown	Pot Life 	4-5 Hours	4-5 Hours

IV. General Surface Preparation

	<p>For best results, all substrates must be washed with soap and water. Rinse the surface well and wipe dry with a clean cloth. A scuff pad and scuffing agent is suitable to clean all hydrophilic contaminants on the surface. Wipe with a clean dry cloth.</p> <p>Solvent clean the surface with a Wax and Grease Remover or Pre-Cleaning solvent cleaner. Wipe down with a clean cloth and wipe down. When the surface is dry, you are ready for application.</p>
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V. Application Recommendations

Number of Coats 	<p>Apply 2 Single Wet Coats. If heavy polishing and buffing is desired, a 3rd coat may be applied after flash time.</p>	Use of Accelerator* 	<p>For slow film cure situations: ½ fluid oz. of accelerator CB-018 is recommended per sprayable quart of clear coat.</p>
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<p style="text-align: center;">Film Thickness*</p> 	<p>Each coat is around 1.4-1.6 mils without reduction. A 2:1:1 Reducer reduces the mil thickness to .75-.8 mils. It is recommended to have a mil thickness of at least 2.2 mils of thickness but not exceed 3.6 mils. For jobs that desire extensive coating and buffing, we recommend 3.2-3.4 total mil thickness.</p>	<p style="text-align: center;">Wet Sand-Polish*</p> 	<p>Start with wet sanding with 400 grit sandpaper and then fill with a polishing compound. Sand up to 1,000 and then 1,200 grit sandpaper until crosshatch pattern marks appear. Proceed to buffing afterwards.</p>
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WHEN USING ACCELERATOR:

The painter should bear in mind that the speed of solvents/activator governs the solvent speed while the use of accelerator governs the speed of the film cure. It is important to properly assess the drying problem before deciding to use a faster activator/reducer or using accelerator. If the paint film is still wet and the paint was not applied too heavily, it is recommended to use a faster activator or faster reducer speed. If the paint film is soft or is not drying or not ready to buff, then the use of accelerator is allowed. One should keep in mind that the use of accelerator interferes with the intended chemistry of your urethane formation. Too much accelerator could be detrimental to your paint job. The addition of accelerator could make the product more difficult to wet sand and buff.

FILM THICKNESS GUIDELINES:

When trying to abide by the measurement estimates for mil thickness, it is safe to assume the following:

- 1 Full Coat no Reducer = 1.54 mils**
- 1 Medium(Light Coat) no Reducer = .77 mils**
- 1 Full Coat 2:1:1 Mixture w/Reducer = 1.10 mils**
- 1 Medium(Light Coat) 2:1:1 w/Reducer = .55 mils**

These are only theoretical measurements for quick calculations. Based on the spray gun used, distance from the spray and various other factors, the actual mil thickness will vary.

Always remember: The higher the film build, the MORE critical it is to wait the appropriate flash time
The higher the film build sprayed on = a longer flash time

The higher the film build, the longer of a barrier the solvents have to escape the film. A complete disaster full of solvent popping, die back and poor adhesion can happen if you apply the next coat before the solvents of the previous coat have escaped. Adding reducer to an application allows for a thinner film build but will add more solvent in the mixture.






BUFFING RECOMMENDATIONS:

With heavier coats (high mil thickness) a discrepancy in texture along the surface could appear (orange-peel). Over time, the amount of orange peel will reduce but one could also eliminate orange peel with wet sanding and buffing. We recommend following the instructions of the buffing compound manufacturer. Use caution when using a buffing compound. Too much buffing compound could burn through the clear coat.

IMPORTANT INFORMATION ABOUT USING REDUCER:

It is important to ONLY use URETHANE GRADE REDUCER. Lacquer thinner and other grades of reducer can cause defects in the film as they are not able to dilute the film properly. This can ruin the overall flow and rheology of the clear coat. Adding quality should immediately drop the viscosity of the clear coat. A poor grade of reducer will not reduce the viscosity of the paint and will lead to problems in the appearance of the clear coat. For 50 State Compliance, use either 0 or LOW VOC reducer. CARB and SQAMD require a final application VOC of no more than 250 g/L or 2.1 lbs./gal. Using a non-compliant reducer can cause the overall coating VOC to go over those limits. CCG Products Inc.® condemns the use of non-compliant reducer in VOC restricted states. We recommend that you follow your local VOC regulations.

VI. Regulatory/Product Information

Product Specifications 	% Solids Mix (RTS) (Ready-to-Spray)	47.5-48.5%	Product Viscosity RTS (Ready to Spray)		21-23 sec. 4 mm DIN	
	Product Density:	lbs./gal.	VOC Content 	Product	VOC Actual	VOC Regulatory
	CC-221LV	8.40-8.60		CC-221LV	~.63 lbs./gal (~75 g/l)	~1.57 lbs./gal (~188 g/l)
	CC-22LV M,F,S	9.30-9.80	Product Description		Transparent liquid	
Cleaning and Product Disposal 	All products must be disposed of according to the regulations of the environmental health authorities. Clean equipment following all local and federal regulations.		Manufacturer Support and Information 		www.catamountcoatings.com Phone: (980) 376-2325 Email : <u>support@catamountcoatings.com</u> 1441 E Broad St. Fuquay-Varina,, North Carolina 27526	
Catamount Product Statement 	Product is intended for professional use only. The information on this data sheet is based on the current state of knowledge on the performance and properties of this product. Any product use for the purpose of anything other than what is explicitly explained or recommended is done at the risk of the product user. It is the responsibility of the user to fulfill the demands of the local and federal rules and legislation. It is important to read the Safety Data Sheet(SDS) and the Technical Data Sheet(TDS) for best understanding of product application. All advice given about our product or process is correct to the best of our knowledge. The quality or condition of the intended substrate or the addition of any product not manufactured by CCG Products for application is not in our control. Therefore, unless specifically agreed upon in writing, we do not accept any liability for any loss or damage arising from improper use of our product. It is the user's responsibility to verify that this data sheet is updated and current prior to using this product. Actual physical data is based on application and the data provided serves as a guideline for theoretical values. If a warranty is issued, it will be offered on replacement on product if fault is found with the product. All brand names in this data sheet are trademarks and/or licensed to CCG Products Inc.					