CP-401

2K PREMIUM DIRECT TO METAL HIGH-BUILD PRIMER,
PRIMER SURFACER & URETHANE SEALER

TECHNICAL DATA SHEET

I. COMPONENTS

- CP-401 LG - LIGHT GRAY
- CP-401 R - RED
- CP-401 W – WHITE
- CP-401 Y - YELLOW
- CP-401 B – BLACK
- CP-401 Bl – BLUE
- CP-41 - ACTIVATOR
- CB-18- ACCELERATOR

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 a 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.

III. CP-401 - APPLICATION CHARTS

i. Gun Settings

	PRIMER	SURFACER	SEALER
Fluid Tip (HVLP)	1.6- 2.0 mm	1.6-1.8 mm	1.4-1.6mm
Pressure (HVLP)	<10 psi @ air cap	<10 psi @ air cap	<10 psi @ air cap
Gravity Feed Tip	1.4 -1.8 mm	1.6-1.8 mm	1.4-1.6 mm
Pressure(Gravity Feed)	30-40 psi	30-40 psi	30-40 psi

ii. Mix Ratio

	PRIMER	SURFACER	SEALER
A= CP-401 PRIMER	A:B:C	A:B:C	A:B:C
B=CP-41 ACTIVATOR			
C=URETHANE GRADE REDUCER	4:1:0	4:1:1	4:1:2

iii. General Surface Preparation

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 in the surface. Wipe with a clean dry cloth.

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.

iv. Sanding Preparation Chart

SUBSTRATE	PRIMER/SURFACER (Dry Sanding) 	SEALER (Dry Sanding) 	SEALER (Wet Sanding) 
Bare Steel	#P80 -#P120 Then finish w/#P120	#P80 -#P120 Then finish w/#P120	N/A
Galvanized Steel	#P120 - #P180	#P120 - #P180	N/A
Bare Aluminum	#P150 - #P180 or Red Scuff Pad	#P150 - #P180 or Red Scuff Pad	N/A
OEM e-Coat**	Solvent Test and Apply Directly if passes Solvent Test	Solvent Test/Apply Directly if passes Solvent Test	N/A
SMC/Fiberglass Gel Coat	#P220 - #P320	#P320 - #P400	#P480 - #P600
Raw Plastics (Rigid)*	#P320 - #P400	#P360 - #P420	#P480 - #P600
TPO Plastics*	#P320 - #P400	#P360 - #P420	#P500 - #P600
Non-TPO Plastics*	#P320- #P400	#P320- #P400	#P480 - #P600
Aftermarket Primed Bumpers*	N/A	#P1000- #P1200	N/A
Body Filler/ Polyester Filler	#P180 -#P240 Then #P180 - #P220	N/A	N/A
Existing Finishes**	#P180 -#P240 or #P240 - #P360	#P320 - #P400	#P480 - #P600
Glass (GRP)	N/A	N/A	N/A

*** - Prepare all plastic parts by first using *Adhesion Promoter*. Adhesion tests by either solvent or cross-hatchet are recommended prior to application and sanding.**

****- Test all previous finishes with a solvent test using either *Paint Thinner* or *Acetone*. If the coating on the previous finish fails, strip down to bare part and refer to the chart on next step for application. For more on Solvent Tests- Refer to CC-101 Guide.**

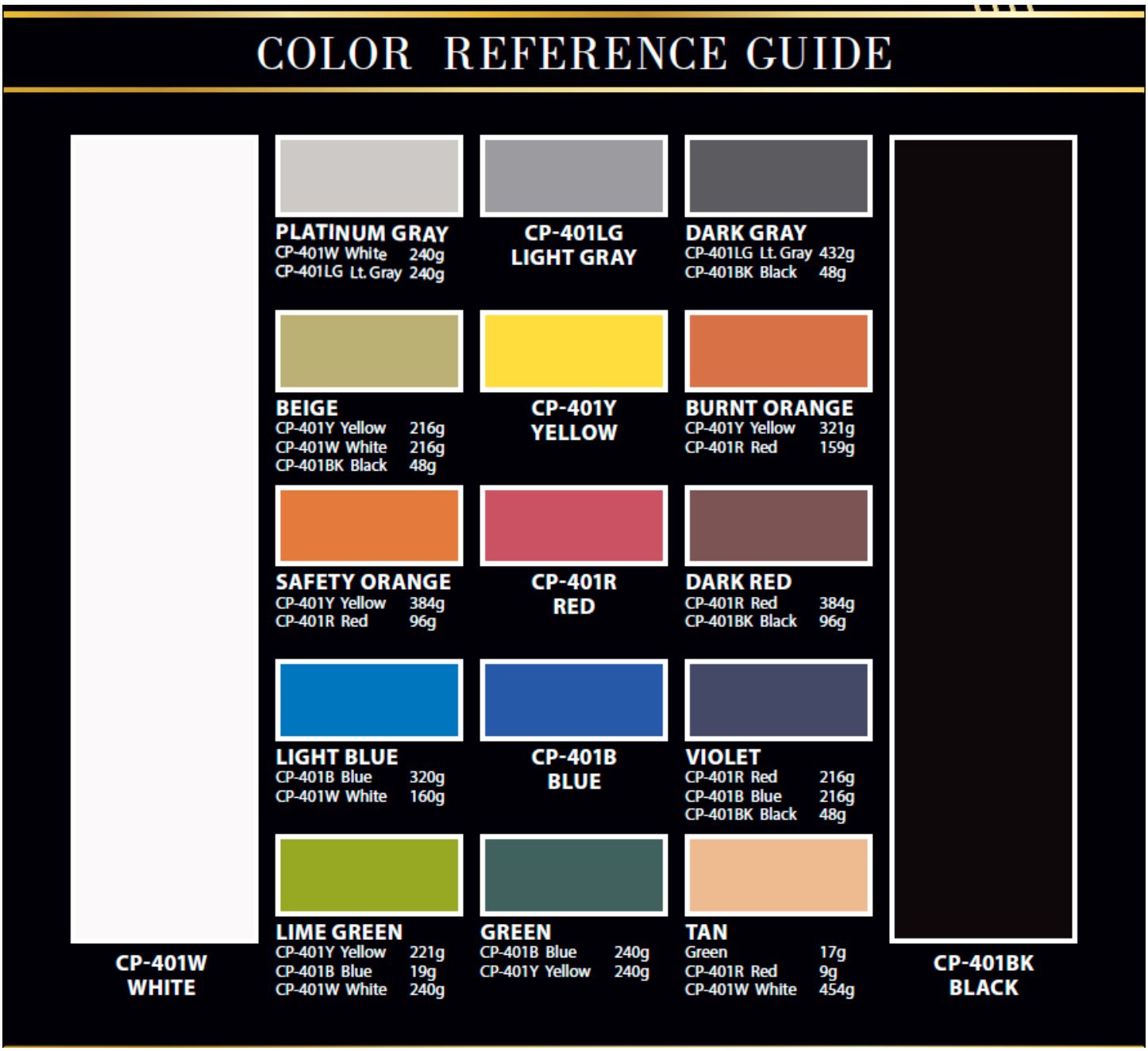
v. Substrate Preparation Table

Substrate:	Additional Preparation Required:
Pre-Existing OEM Finishes	None Required.
Bare Metal	For small areas: CP-401 will provide adequate DTM(Direct-to-Metal) adhesion. For large areas: Although CP-401 has great DTM adhesion, larger parts (such as whole panels) will require some pre-treatment with either a self-etching primer or a corrosion-inhibiting primer to improve the ionic bonding adhesion from the metal to the primer.
Raw Plastics	Plastic panels require an adhesion promoter such as **Archemya 4910 EZ Flow Adhesion Promoter**. When using, spray 1-2 mist coats and wait 5 minutes prior to priming with CP-401.
Body Filler/Polyester Filler	Be careful not to saturate body filler with water or cleaners.
OEM Factory e-Coats	Perform a **Solvent Test**. If e-Coat paint does not come off, proceed to sanding. Featheredge all broken film areas. The sealer mixture is recommended for edging parts.
Primed Aftermarket Parts	Sand carefully to avoid taking off factory primer. A solvent test is recommended on a small spot prior to application. If it fails, sand and then mist on 4910 EZ Flow.

It is important to always keep your surface clean to ensure the best adhesion and avoiding contamination issues during application. It is important to remember that if your surface is contaminated during the primer phase, the issues will only get worse during topcoating.

vi. Catamount Color Primer System

For color mixes and possibilities, refer to our Color Reference Guide.



NOTE: These chart formulas are calculated based on 480 grams or the equivalent to 10 fl. oz. For easier conversion factors, you may substitute the unit of g to mL, % Weight, or % Volume. For example: When mixing Violet, a mixture of 45% Red, 45% Blue and 10% Black. This conversion is easy-to-use and does not need to be approximate for most applications. The purpose of the color spectrum is to enhance the ground coat so that less coverage is required with basecoat. Although the colors are designed by weight, a % error of around 10% is typically acceptable. Contact technical support for any additional help with our color system.

vii. Application Times

	Primer	Surfacer	Sealer(Dry)	Sealer(Wet)
Flash Times 	5-10 min. between coats	8-12 min. between coats	15-25 min. Prior to Basecoat	5-10 min. after first thin coat 15-25 min. Prior to Basecoat
Dry to Sand Times 	60-120 min.	60-75 min.	15-30 min. (nib sanding if desired)	15-30 min (nib sanding if desired)
Dry Without Sanding Times 	N/A	N/A	20-30 min.	15-25 min.
Dry to Sand (Force Dry 130°F) 	20-25 min.	15-20 min	N/A	N/A
Recoat Window 	N/A	N/A	Must apply topcoat within 3.5 hours of sealer	Must apply topcoat between 15-45 minutes after sealer
Pot Life 	1 Hour	1.5 Hours	2-3 Hours	2-3 Hours

viii. Dry Time Recommendations

Dry Times:

Application flash, dry and cure times are correlational to the temperature, the thickness and wetness applied, and pressure/airflow coming from the gun.

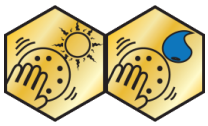
Pot Life:

By definition, **pot life** is the time it takes for the viscosity of the mixture to double. The pot life was found when viscosity doubled at 75°F. Increased temperatures

Recoat Window:

When the application time of the sealer has passed the "closing window", the sealer must be sanded.

IV. Application Guide/Optional Additives

	Primer/Primer Surfacer	Sealer
Number of Coats and Flash Times 	**Apply 2-3 single wet coats. Over body filler and previously sanded areas, it is best to apply one coat over the repair and then after a "flash dry" proceed with the second and third coat. The target flash time of the application will range from 5-15 minutes. Each application should leave a glossy finish which and eventually becomes matte. A good indicator for when to apply the next coat is when the surface becomes completely matte. You can use the gloss as a "*guide coat*" for application. A 3rd coat is only recommended for primer-surfacer(4:1:1) applications since the film thickness without any reduction could be excessive.**	**Apply 1 thin wet coat over the surface. Ensure that the surface is completely covered. For sand through areas, first apply a thin coat to make the substrate layers uniform before applying a normal coat. Allow a minimum flash time of 15 minutes (75°F) prior to topcoating. Apply your topcoat within 4 hours of sealer (75°F).** **Wet-on-Wet: Product can be used wet-on-wet when edging in parts. Wait the appropriate flash time for sealer (15-45 minutes).**
Sanding to Finish 	**Dry Sanding: #P320-#P-400 is recommended during initial sanding throughout the application. Final sanding should be done with #P500-#P600 before moving forward with topcoat.** **Wet Sanding: During wet sanding, use a maximum of #P200 or less throughout sanding. Final sanding should be done with #P800 before to topcoat.**	**Nib sanding can be done to generate a more uniform coat throughout.** **Barrier Coating: Apply 2 full coats to achieve around 2.0 mils and allow flash to be handslick between coats. Allow to dry overnight at 75-80°F. Scuff sand with #P600 or finer before topcoat. Apply only to complete panels.**
Film Thickness 	**1 full coat will have 1.8-2.4 mil thickness as a High Build Primer (4:1:0) and will cover 1.6-2.0 mils per coat as a Primer-Surfacer (4:1:1)**	**1 full coat will have a thickness of 0.8-1.1 mil thickness as a Primer-Sealer(4:1:2)**
Use of Accelerator* 	**For slow film cure situations: ¼ to ½ fluid oz. of accelerator CB-18 is recommended per sprayable quart of paint. The user should be aware that CP-401 has a fast dry time and any extra addition of accelerator could risk the properties of the film. Use caution before using accelerator, and is only recommend in low temperature conditions where the speed of film cure is impacted.**	

Other Additives:

FLEX ADDITIVE:
When the flexibility of a product needs to be increased, you can add a flex additive to improve flexibility for application of flexible parts. See manufacturer instructions for addition of flex additive.

V. Regulatory/Product Information

Product Specifications 	**% Solids Mix (RTS) (4:1:0)**	**69.0-71.4%**	**Product Viscosity RTS (4:1:1)**		**19-22 sec. #4 DIN (4:1:1)**	
	Product Density:	**lbs./gal.**	**VOC Content** 	**Product Mix**	**VOC lbs./gal 4:1:0**	**VOC g/L 4:1:1***
	CP-401 LG,W,B,R,Y,Bl	**12.75-13.65**		**4:1:0** **4:1:1** **4:1:2**	**~4.07 lbs./gal (~488 g/l)**	**~3.48 lbs./gal (~417 g/l) *Zero VOC Reducer Used**
	CP-41	**8.00-8.70**	**Product Description**		**Viscous Gray Liquid when mixed (4:1:0)**	

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: (855) 294-3306 Email : *support@ catamountcoatings.com* 117 A W 29th St. Charlotte, North Carolina 28206
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