SHERWIN-WILLIAMS.

AEROSPACE COATINGS

ADVANTAGES

- Quick drying. Allows for multiple color livery applications per day
- Perfect for small general aviation aircraft and helicopters where expedited production times are required
- Available in opaque, mica, metallic and hybrid finishes
- Simple 3:1:2 Mixing Ratio
- One or two double track coat application for most colors
- No baking required
- Dries quickly at ambient temperatures
- Apply additional colors without mechanically sanding
- Several Clearcoat options available to use with system
- Excellent opacity at low film thickness
- Excellent flow and leveling
- Long pot life
- Easy to keep clean and maintain

SKYscapes® General Aviation Basecoat Colors

855 Series – SG, SGE, SGM and SGP Colors

DESCRIPTION

SKYscapes® General Aviation (GA) Basecoat polyurethane is a high-performance Sherwin-Williams topcoat that is applied using a basecoat-clearcoat process. It is specially designed for productivity and appearance on the exterior surfaces of general aviation aircraft and helicopters. SKYscapes® GA basecoat delivers a consistent, durable and colorful solid, mica or metallic effect finishes.

COATING PROPERTIES

Solids:	**Sprayable**
By weight	27.0% - 49.0% depends on color
By volume	22.0% - 32.0% depends on color
Density:	0.99 – 1.20 g/ml depends on color
Viscosity–Sprayable	13-17 seconds
Gardner Signature #2 Zahn Cup	
Mixed V.O.C.	
U.S. Exempt Solvent	<3.5 lbs./gal (420 g/L)
Non-Exempt Solvent	<6.1 lbs./gal (732 g/L)
Useable Pot Life	
At 77°F / 25°C	
Standard Mix	3 Hours
Theoretical Coverage	
Per dry mil	370-520 ft.^{2} / gal.
Per 25 microns	9.3 -12.8 m^2 / L
Dry Film Weight	
Per dry mil	0.0060 – 0.0092 lbs. / ft.^{2}
Per 25 microns	28.9 – 45.8 g / m^2

SHELF LIFE

Shelf Life is applicable only for materials stored in unopened and undamaged original factory filled containers.

Minimum Storage Temp: 40ºF / 4ºC
Maximum Storage Temp: 100ºF / 37ºC

855 Series – SG, SGE, SGM and SGP Colors:	2 years
CM0855GH4 Hardener:	2 years
CM0855GR0 Slow BC Reducer – Opaque Colors	2 years
CM0855GR2 Medium BC Reducer – Opaque Colors	2 years
CM0855GR5 Fast BC Reducer – Opaque Colors	2 years
CM0855ER2 Medium BC Reducer – Effect Colors	7 years
CM0855ER5 Fast BC Reducer – Effect Colors	7 years

SURFACE PREPARATION

SKYscapes® General Aviation Basecoats should be applied to a surface that has been coated with an approved, properly prepared and applied Sherwin-Williams Aerospace Epoxy or Urethane primer systems.

Refer to Sherwin-Williams Corrosion Primer and Sanding Surfacer Product Data Sheets data sheets or contact your Sherwin-Williams Representative for complete details.

MIXING INSTRUCTIONS

Shake color component for 15 minutes before mixing.

Opaque Colors

Mix by Volume:

3 Parts	SKYscapes® General Aviation Opaque Colors **SG Colors** (Opaque)
1 Part	SKYscapes® General Aviation Hardener **CM0855GH4**
2 Parts	SKYscapes® General Aviation Opaque Color Reducers **CM0855GR0** Slow Basecoat Reducer or **CM0855GR2** Medium Basecoat Reducer or **CM0855GR5** Fast Basecoat Reducer

Use the CM0855GR0 for overall applications requiring ideal appearance or high temperature conditions.

Effect Colors

3 Parts	SKYscapes® General Aviation Effect Colors **SGE (Effect – Hybrid Metallic and Pearl)** **SGM (Metallic)** **SGP (Pearl)**
1 Part	SKYscapes® General Aviation Hardener **CM0855GH4**
2 Parts	SKYscapes® General Aviation Effect Color Reducers **CM0855ER2** Medium Basecoat Reducer or **CM0855ER5** Fast Basecoat Reducer

Add the Hardener and Reducer into the color component. Stir in slowly. It is recommended to filter strain the mixed basecoat before placing material in containers for spraying.

APPLICATION

This product can be applied using conventional air spray, HVLP Gravity or siphon; Electrostatic air spray

Typical Fluid Tip Sizes:

HVLP / compliant guns.	Fluid Tips 1.3-1.6 mm
Conventional Pressure Feed	Fluid Tips 1.0-1.2 mm
E/S air spray with pressure Feed	Fluid Tips 1.0 to 1.5 mm
Typical fluid flow rates	8-12 oz per min

Optimize the chosen spray equipment following the manufacturers set up guidelines. Adjust flow rate to suit the available atomization air available.

Apply basecoat in medium coats at a gun distance of 8-10 inches. Allow each coat to become hand slick (minimum 15 minutes) before applying the next coat. (For all effect colors, complete the application using a low-pressure cross hatch/ finesse coat at a 10-12" distance using full fan.)

To enhance the overall final appearance of the paint film application, CM0850AP8 Appearance Enhancer can be applied before clearcoat. The CM0850AP8 is essentially a clearcoat preview. All surface corrections should be completed at this time. The CM0850AP8 will help to wet finger marks and tape gum, assist with clearcoat hold up on livery line edges and picture framing, wets general surface contamination, enhances clearcoat low film wetting, and improves the clearcoat dry profile. For additional information, please refer to the CM0850AP8 Product Data Sheet.

Allow at least a 30-minute flash off time before clear coating @ 77°F 50%RH. Cooler temperatures will extend the flash time before clear coating.

Recommended dry film thickness is 1.2 – 2.0 mils (30-50 microns).

NOTE: Some colors may require thicker films to achieve complete hiding.

All SKYscapes® GA Basecoat colors **must be** clear coated. SKYscapes® Clearcoat (CM0850180), SKYscapes® General Aviation Clearcoats (CM0850CC1 or CM0855CC3), Acry Glo Clear (CM0571080) or Acry Glo HS Clear (CM0830080) are also acceptable options. Refer to the applicable clearcoat product data sheet for mixing and application procedures.

HIDING COAT, WHEN TO USE IT?

When applying several basecoat colors as part of the decorative scheme, the background color may be significantly darker than the final basecoat color. Also, ideal if there are multiple burn-throughs that need to be addressed.

The Hiding coat approach offers the refinisher many privileges.
- Achieve immediate near/full opacity over the multi-colored/ dark background
- A lower DFT of the final color
- Reduce the number of final color coats
- Improved repairability
- A lighter scheme weight
- A faster application
- Product cost savings
- Saves time

Hiding coat mixing (by Volume):

SKYscapes GA Color	75%
CM0855103 Matterhorn White	25%
or CM0855102 Snow White	

The pre-defined gray shade listed on the formula in Sky Match can also be used as a hiding coat.

Mix the hiding coat color per mixing instruction. 3:1 plus 2 parts of the Opaque reducer of choice (CM0855GR0, CM0855GR2 or CM0855GR5).

Apply one closed film coat of the hiding coat. Allow a minimum of 15 minutes followed by two to three medium wet coats of the true topcoat color. Be sure to allow a minimum of 15 minutes between coats.

DRYING SCHEDULE

Dry times are based on the dry film thickness of 2.0 mils (50 microns).

Air Dry Times (77°F / 25°C and 50% RH)	Min
Tack Free	10-20 Minutes
Dry to tape	60-90 Minutes
To apply Clearcoat	30-60 Minutes
Maximum non scuff recoat time	96 Hours

Force Dry Times	
Dry to Tape (120 F)	30 Minutes
Dry to Tape (140 F)	20 Minutes
Accelerated mix	N/A

NOTE: Lower temperatures, heavy film thickness, and poor air flow / movement will extend the dry time.

PREPARING BASECOAT FOR REAPPLICATION

Use one of the following options when it is necessary to re-apply basecoat for repairs:
- Use P320-grit D/A papers or higher up to P600.
- Fine grade Wet/dry sandpaper (600+) may also be used
- Red or Gray Scotchbrite

BASECOAT PREPARATION PRIOR TO OVERCOATING

Only use CM0110158 Basecoat Surface Cleaner to remove dust or light contamination. Use the wipe on, wipe off technique. Change to clean cloths regularly.

EQUIPMENT CLEANUP

Use clean Ketone–type solvents such as CM0110308 Reducer. Do not allow material to cure inside equipment.

PRODUCT INFORMATION

Confirm compliance with national, state, and local air quality rules before use.

Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application, which are not known, or under our control, The Sherwin–Williams Company cannot make any warranties as to the result.