

AEROSPACE COATINGS

PRODUCT DATA

SKYscapes® **Basecoat**

850 Series (S Colors)

DESCRIPTION

SKYscapes® polyester urethane is Sherwin-Williams exclusive topcoat that is applied using a revolutionary basecoat-clearcoat process. It is designed to be used on exterior surfaces of commercial and general aviation aircraft. SKYscapes® delivers a consistent, durable, colorful finish. This coating is qualified to SAE International's AMS 3095.

| COATING PROPERTIES | |
|---|---|
| Solids: By weight By volume | Sprayable 45.0% - 55.4% depends on color 36.6% - 38.3% depends on color |
| Density: | 0.94 – 1.15 g/ml depends on color |
| Viscosity–Sprayable Gardner Signature #2 Zahn Cup | 15-17 seconds |
| Mixed V.O.C. (Ratio 4:1:3) U.S. Exempt Solvent Non-Exempt Solvent | <3.5 lbs./gal (420 g/L) <4.5 lbs./gal (535 g/L) |
| Useable Pot Life At 77°F / 25°C | 3 Hours |
| Theoretical Coverage Per dry mil Per 25 microns | 587-614 ft. ² / gal. 14.4-15.1 m ² / L |
| Dry Film Weight Per dry mil Per 25 microns | 0.0060 - 0.0087 lbs. / ft. ² $29.4 - 42.2$ g / m ² |

SHELF LIFE

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

Minimum Storage Temp: 40°F / 4°C Maximum Storage Temp: 100°F / 37°C

850 Series / S-series Mixed colors: 3 years CM0850**081**: 2 years CM0850**BR0**: 7 years CM0850BR1: 7 years CM0850BR3: 2 years

ADVANTAGES

- Quick drying. Allows for multiple color livery applications per day
- Qualified to SAE International's AMS 3095
- One double track coat application for most colors
- No baking required
- · Dries quickly at ambient temperatures
- Offers a 72 hour non sand recoat time at room temperatures
- Apply additional colors without mechanically sanding
- Excellent opacity at low film thickness
- Easy to mix
- · Excellent flow and leveling
- · Long pot life
- Easier to repair than traditional single-stage paint systems
- A variety of clearcoat options are
- Full color palette is available
- Easy to keep clean and maintain
- Designed to work over all Sherwin Williams Aerospace Epoxy or Urethane exterior primers



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SHERWIN-WILLIAMS OSPACE COATINGS

PRODUCT DATA

SURFACE PREPARATION

SKYscapes® Basecoat 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.

Mix by Volume:

4 Parts SKYscapes® Color

850 Series (S- Intermix Solid Color Numbers)

SKYscapes® Basecoat Hardener 1 Part

CM0850081

SKYscapes® Basecoat Activator / Reducer 3 Parts

> (Select from options below) CM0850BR0 - Extra Slow CM0850BR1 - Slow CM0850BR3 - Medium

Reducer Selection options:

CM0850BR0: Use in hot, humid conditions for full repaint for wide bodied commercial aircraft or application process times that are slow per coat.

CM0850BR1: Use in ambient conditions for full repaint for narrow and wide bodied commercial aircraft or application process times that are fast per coat.

CM0850BR3: Use in ambient conditions on full repaint general aviation aircraft (i.e. business jets, helicopters, etc.), stripes, or part repaint on all aircraft sizes.

For fast repair options, please refer to the CM0850RA9 SKYscapes® Basecoat Repair Additive Product Data Sheet.

To over reduce the basecoat for color blending, use a maximum of 1 part of CM0110944 US Exempt Reducer.

Add the Hardener and Reducer into the color Component. Stir in slowly and allow a 15-30 minute induction time.

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 airspray or air assisted airless (AAA)

Typical Fluid Tip Sizes:

HVLP / compliant guns. Fluid Tips 1.3 or 1.4 mm E/S airspray with pressure pot Fluid Tips 1.0 to 1.4 mm E/S AAA Fluid Tips 6.11 or 6.13

Apply 1 wet closed film double track coat to full hide. Certain colors may require a 2nd double track coat 15 minutes to 1 hour apart to achieve full hide.

Recommended dry film thickness is 1.2 - 2.0 mils (30 -50 microns). Some colors may require thicker films to achieve complete hiding.

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

DRYING SCHEDULE

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

| Air Dry Times (75°F / 25°C and 50% RH) | <u>Min</u> | <u>Max</u> |
|--|------------|------------|
| 850BR3 Dry to tape | 2 Hours | 3 Hours |
| 850 BR1 Dry to tape | 3 Hours | |
| To lightly sand | 4 Hours | |
| To apply Clearcoat* | 2 Hours | 72 Hrs |
| <u>Air Dry Times</u> (> 95°F / 35°C and 80% RH+) | <u>Min</u> | Max |
| 850 BR0 Dry to tape | 2 Hours | 3 Hours |
| To lightly sand | 4 Hours | |
| To apply Clearcoat* | 2 Hours | 72 Hrc |

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

BASECOAT REACTIVATION WITHOUT SANDING

To reactivate aged basecoat (over the maximum dry time allowed above) prior to applying clearcoat, apply the SKYscapes® Adhesion Promoter (CM0850AP8). Refer to the CM0850AP8 Product Data sheet for additional information.

PREPARING BASECOAT FOR REAPPLICATION

Use one of the following options when it is necessary to re-apply basecoat for repairs:

- Use 320-grit D/A papers or higher.
- Fine grade Wet/dry sandpaper (600+) may also be used
- Red or Gray scotchbrite

BASECOAT PREPARATION PRIOR TO OVERCOATING

Use SW Aerospace CM0110120 Pre-paint Wipe Cleaning solvent to remove dust or light contamination. Use the wipe on, wipe off technique. Change to clean cloths regularly. Allow CM0110120 to flash off for a minimum of 15 minutes before reapplying basecoat or clearcoat.

EQUIPMENT CLEANUP

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

PRODUCT INFORMATION

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 end result.



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