



SKYscapes® Clearcoat

CM0850180

ADVANTAGES

- High gloss, extremely durable product
- Designed to work over Sherwin-Williams SKYscapes® basecoat system
- Qualified to SAE International's AMS 3095.
- Can be applied over properly abraded Jet Glo Express™ using P600 paper.
- Can be applied over Express after allowing a 3hr flash.
- Can also be used over Acry Glo® Conventional and Acry Glo® High Solids metallic colors.
- Easy to mix
- Excellent flow and leveling
- Good fluid resistance
- Excellent wet edge
- Long pot life
- Different reducer selections available for all temperatures and aircraft sizes to achieve the appearance and dry time needed
- Machine Buffable

DESCRIPTION

SKYscapes® Clearcoat is a high performance polyester urethane designed to be used over SKYscapes® basecoat on exterior surfaces of commercial or general aviation aircraft. This high performance product delivers a high-gloss, durable finish that can be easily cleaned, buffed and repaired. This coating is qualified to SAE International's AMS 3095.

COATING PROPERTIES

Solids:	<u>Sprayable</u>
By weight	49.61%
By volume	42.69%
Density:	1.01 g/ml
Viscosity–Sprayable	
Gardner Signature #2 Zahn Cup	12-18 seconds. Dependant on % of solvent addition.
Viscosity is for recording purposes only	
Mixed V.O.C.	
U.S. Exempt Solvent	<3.5 lbs./gal (420 g/L)
Non-Exempt Solvent	<4.5 lbs./gal (535 g/L)
Useable Pot Life	
at 77°F / 25°C	3 Hours
Theoretical Coverage	
Per dry mil	685 ft. ² / gal.
Per 25 microns	16.8 m ² / L
Dry Film Weight	
Per dry mil	0.0061 lbs. / ft. ²
Per 25 microns	29.8 g / m ²

SHELF LIFE

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

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

CM0850180:	3 years
CM0850181:	2 years
CM0850CR3:	7 years
CM0850CR5:	7 years
CM0850CR7:	7 years

SURFACE PREPARATION

CM0850180 SKYscapes® Clearcoat is designed to be applied over Sherwin Williams 850 series SKYscapes® Basecoat colors. If overcoating window for SKYscapes® Basecoat has been exceeded, please apply SKYscapes® Adhesion Promoter (CM0850AP8) prior to application of SKYscapes® Clearcoat.

MIXING INSTRUCTIONS

Mix by Volume:

- 1 Part** SKYscapes® Clearcoat
CM0850180
- 1 Part** SKYscapes® Clearcoat Hardener
CM0850181
- 1 Part** SKYscapes® Clearcoat Activated Reducer
CM0850CR3 - **Medium**
CM0850CR5 - **Fast**
CM0850CR7 – **Extra Fast**

To improve flow and dry film appearance, also add:
½ - 1 Part U.S. Exempt Reducer
 CM0110944

Reducer Selection options with recommended use:

- **CM0850CR3:** Use in hot, humid conditions for full repaint for wide bodied commercial aircraft or application process times that are slow per coat.
- **CM0850CR5:** Use in ambient conditions for full repaint for narrow and wide bodied commercial aircraft or application process times that are fast per coat.
- **CM0850CR7:** Use in ambient conditions on full repaint general aviation aircraft (i.e. business jets, helicopters, etc.), stripes, or part repaint on all aircraft sizes.

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

Refer to **CM0850CH8** and **CM0850CR9** Product Data Sheets for quick-drying, repair information.

It is recommended to filter strain mixed Clearcoat before placing material in containers for spraying.

APPLICATION

Option 1 Apply one horizontal closed film coat followed immediately by a light vertical dust coat to ensure good flow and Leveling.

Option 2 Apply one horizontal closed film coat, allow to flash off For approx ½ hour. Apply a second closed film coat to ensure good flow and leveling.

Recommended dry film thickness: 1.6 mils to 2.2 mils

RECOMMENDED FLUID TIP SIZES

Electrostatic AAA with Airless pump

Fluid Tips 5.11 / up to 7.11 5.13 / up to 8.13
 Air Cap Pressure 70 – 100 psi

Electrostatic Airspray with pressure pot

Fluid Tips 1.0 to 1.4mm
 Air Cap Pressure 45 psi – 100 psi

HVLP / compliant guns.

Fluid Tips 1.2 - 1.4mm
 Air Cap Pressure 10 psi – 30 psi

DRYING SCHEDULE

Dry times are based on the dry film thickness of 2 mils (50 microns).

Dry To Tape Times: (75°F / 25°C and 50% RH)

Select from the Clearcoat Activated Reducer Options Below:

CM0850CR3 Medium	CM0850CR5 Fast	CM0850CR7 Extra Fast
16 Hours >	11-13 Hours	6-8 Hours

Flash Off Time:

Before applying heat, allow the Clearcoat to flash off at room temp for 30% of its dry to tape time. (See dry time chart above.)

Force Dry Time:

Minimum 3 Hours @ max 120°F (45°C)

NOTE: Lower temperatures, heavy film thickness, improper and poor Air movement will extend the dry time.

PREPARING CLEARCOAT FOR REAPPLICATION

Use one of the following options when needing to re-apply clearcoat for repairs or additional coats:

Commercial Aircraft:

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

The full gloss has to be removed.

Business Aircraft or VIP Finish

- Use P600 - P800-grit D/A papers.
- Fine grade Wet/dry sandpaper (800+) may also be used
- Red or Gray scotchbrite at tape line areas

The full gloss and profile has to be removed.

Note: Closely inspect the sanded area, ensure that there is no burn through areas into the color basecoat.

CLEARCOAT 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 re-applying Clearcoat.

Re-apply the Clearcoat using Option 1 or 2.

CLEARCOAT BUFFING

The optimal buffing window is between 24 and 72 hours at ambient temperatures. If longer buffing window is needed, please use Acry Glo Clear (CM0571080) or Acry Glo HS Clear (CM0830080).

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.

SKYscapes® Clearcoat CM0850180

- 1** Mix by volume.
- 2** Add in order shown below. The Hardener and Activated Reducer should be mixed into the clear component. Stir as components are added.

Order of Addition	Volume	U.S.		Metric	
		Large	Small	Large	Small
 CM0850180 Clearcoat	1 Part	1 Gal.	1 Qt.	3.8 L	.95 L
 CM0850181 Hardener	1 Part	1 Gal.	1 Qt.	3.8 L	.95 L
 CM0850CRX Select Activated Reducer from Options below	1 Part	1 Gal.	1 Qt.	3.8 L	.95 L

To improve flow and dry film appearance, also add: ½ - 1 Part U.S. Exempt Reducer CM0110944.

Activated Reducer Options:

- **CM0850CR3:** Use in hot, humid conditions for full repaint for wide bodied commercial aircraft or application process times that are slow per coat.
- **CM0850CR5:** Use in ambient conditions for full repaint for narrow and wide bodied commercial aircraft or application process times that are fast per coat.
- **CM0850CR7:** Use in ambient conditions on full repaint general aviation aircraft (i.e. business jets, helicopters, etc.), stripes, or part repaint on all aircraft sizes.

3 Allow mix to induct 15-30 minutes.

4 Filter strain and apply.