



Tech Data

AC-9185 Diamond Clear

AC-9185 Production Clear is a water white, high quality clearcoat designed for larger repairs and complete refinishing over most aftermarket basecoat systems. AC-9185 dries fast and retains high gloss and DOI. AC-9185 provides excellent durability and is resistant to environmental conditions such as sunlight and acid rain. AC-9185 can be buffed to match the original finish after 5-14 hours air dry and can be buffed for several days. With AH-6170, AH-6180, or AH-6190 hardeners, AC-9185 can be applied in a variety of shop temperatures and humidity conditions.

Products

AC-9185	Production Clear
AH-6170	Activator Fast
AH-6180	Activator Medium
AH-6190	Activator Slow
AR-2040	Uni Reducer Fast
AR-2050	Uni Reducer Medium
AR-2060	Uni Reducer Slow

Application

Surface Preparation, Bare Substrates

Solvent wash surface with a good grade wax and grease remover such as AS-2900 and wipe dry with a clean cloth. Apply three single wet coats of AP-8300 Series Epoxy Primer according to instructions on data sheet. Follow with two to three coats of AP-8020 Production Prime.

Surface Preparation, Prepainted Substrates

Wash surfaces with a mild detergent and hot water. Rinse with clean water and wipe dry with a clean cloth. Solvent clean with AS-2900 Clean Ease. Wipe dry with a clean cloth. Sand original paint and repair damaged areas with a good quality non-staining body filler. Apply 2-3 wet coats of AP-8020 Production Prime as needed to fill voids and block sand with 180 to 280 grit treated sandpaper. Finish sand repaired area with 320 grit sandpaper using a DA Sander. For spot repairs, scuff sand area where basecoat and clearcoat will be blended with 320 to 600 grit sandpaper or nylon scuff pad. For overall refinishing, scuff sand the entire car with 320 grit sandpaper or fine scuff pad.

Sealer

Apply appropriate sealers such as AP-8300 Series Epoxy Primer or AP-8020 Production Prime according to manufacturer's instructions. Allow sufficient flash times to allow the solvents to escape film. Insufficient flash times will lead to retarded hardness development of the total system.

Basecoat

For best results, follow flash times and film thickness recommendations of the basecoat supplier. Note: flash times vary between basecoats and are dependent on the shop temperature and air movement. Insufficient basecoat flash time may lead to movement of the basecoat metallic pigments and loss of clearcoat gloss.

Mixing Directions

4 Parts AC-9185	Diamond Clear
1 Part AH-6170, AH-6180, or AH-6190	Activator

Once catalyzed, AC-9185 is ready to spray. However, for specific shop conditions, AC-9185 can be reduced or retarded with up to 10% urethane grade reducer or AR-2100 Retarder. In cold weather, the use of AH-6170 is recommended, however, in place of AH-6170, the addition of a urethane cure accelerator, such as AS-X99, will speed overnight cure. CAUTION: care should be exercised in the addition of cure accelerators to urethane products. A significant reduction in potlife and a loss of clearcoat gloss can occur if over accelerated.

Application

Adjust air pressure at the gun to 45-50 psi for siphon feed guns or 6-10 psi when using a HVLP. Use less pressure to minimize over spray on small jobs. Apply 2-3 wet coats at a gun distance of 8-12 inches allowing each coat to become hand slick before applying the next coat. Recoat times will vary with temperature and air movement between 10 and 30 minutes. Apply each coat of clear within 30 minutes flash of the previous coat to prevent possible recoat lift. Recommended dry film thickness is 1.8 to 2.5 mils.

Blending Procedure

Before blending the Panel with clear, the blended area must be washed and scuff sanded thoroughly with a good quality wax and grease remover such as AR-2900. Apply wet coats of clear to cover the repaired area and slightly beyond. Allow recommended flash times between coats. Extend the second coat 4 to 8 inches beyond the first coat. Begin application of the final coat 4 to 8 inches beyond the second coat and spray into the center of the painted area. Best results can be achieved by the addition of 10% to 50% of a urethane grade reducer in the last coat. Any dry edges remaining can be melted in immediately by misting with a second gun containing a medium temperature urethane reducer.

Drying Schedule

Dry times are based on recommended film thickness and are dependent on ambient temperature. Excessive film thicknesses, low temperature and poor air movement will retard dry times.

<u>Air Dry</u>	<u>AH-6170</u>	<u>AH-6180</u>	<u>AH-6190</u>
Dust Free	10-15 min	10-15 min	20-30 min
Tack Free	20-30 min	25-35 min	45-60 min
Buffable	3-5 hours	4-6 hours	8-10 hours
To deliver	5 hours	6 hours	10 hours

Force Dry Times

Allow 10-15 minutes flash time of final coat of clear when using infrared or radiant heat. Note: The use of AH-6170 is not recommended with bake.

<u>Temperature</u>	<u>AH-6180</u>	<u>AH-6190</u>
110°F	45 min	60 min
120°F	45 min	60 min
140°F	30 min	45 min

Buffing

If buffing is needed to remove dirt, allow the clearcoat to dry the recommended time then wet sand with 800-1000 grit sandpaper followed by 1500 grit sandpaper. When all 800-1000 scratches are removed, buff with a fine grade liquid rubbing compound followed by a polish or glaze compound applied by hand or machine.

Technical Data

Weight Solids		Mixing Ratio	4:1
Package	32.4%	Air Pressure @ Gun	45-50 psi
Ready to Spray	36.0%	Recommended Film Thickness	1.8 - 2.5 mil
Volume Solids		Flash Point	72°F TCC
Package	28.1%	Gloss	90+
Ready to spray	30.5%	DOI	Excellent
VOC @ Gun	4.2 lbs/gal	Pot Life	6 to 8 hours
Viscosity @ Gun	16-19 sec #2 Zahn	Coverage Ready to Spray	515 sq ft

Performance Data

Flexibility	Excellent	Direct Impact	Excellent	Chip Resistance	Excellent
Salt Resistance	Excellent	Humidity Resistance	Excellent	Hardness	3H