

# **Technical Data Sheet**

# PRO-4500 4/1 Quick-Cure Urethane Clearcoat

PRO - 4500 Clearcoat is a water white, high quality clearcoat designed for small spot repairs and complete panel repairs over aftermarket basecoat systems. PRO - 4500 is a super fast dry clear that retains high gloss and DOI and is one of the fastest out of dust clears available today. PRO - 4500 can be polished to match the original finish after 90 minutes to 2 hours air dry. PRO - 4500 is easy to buff and can be buffed for several days. It provides excellent durability and is resistant to environmental conditions such as sunlight and acid rain. This clear can be applied in a variety of shop temperature and humidity conditions and when used as a cut in clear, PRO - 4500 cuts assembly times making it one of the most versatile clears in the marketplace.

# **Products**

PRO – 4500	Hyper-Cure Urethane Clearcoat
PRO - 4560	Hyper-Cure Clearcoat Activator - Winter
PRO - 4570	Hyper-Cure Clearcoat Activator – Medium
PRO - 4580	Hyper-Cure Clearcoat Activator – Slow

# **Application**

#### Surface Preparation, Bare Substrates

Solvent wash surface with a good grade wax and grease remover and wipe dry with a clean cloth. Apply three single wet coats of Corrosion Resistant Epoxy Primer according to instructions on data sheet. Follow with two to three coats of 2K Urethane Primer•Sealer•Surfacer or a Non Isocyanate Primer•Sealer•Surfacer.

## 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 Wax and Grease Remover. 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 2K Urethane Primer•Sealer•Surfacer or Non Isocyanate Primer•Sealer•Surfacer 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 sandpaper or fine scuff pad.

## Sealer

Apply appropriate sealers such Corrosion Resistant Epoxy Primer•Sealer, 2K Urethane Primer / Sealers, or Non Isocyanate Primer•Sealer•Surfacer according to manufacturer's instructions. Allow sufficient flash times for solvents to escape film before applying basecoat. 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 PRO - 4500 1 Part PRO - 4560,70,80 Quick-Cure Urethane Clearcoat Quick-Cure Clearcoat Activator

Once catalyzed, PRO - 4500 is ready to spray. However, for specific shop conditions, PRO-4500 can be reduced or retarded with up to 10% urethane grade reducer or Retarder. In cold weather, the use of PRO - 4560 is recommended.. 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. The addition of cure accelerator with PRO-4560 and PRO-4570 is not recommended.

### **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 45 minutes flash of the previous coat to prevent possible recoat lift. Recommended dry film thickness is 1.8 to 2.5 mils.

#### **Repairing – Recoating**

The PRO - 4500 may be recoated after a 4 hour air dry at 77'F, or after a 1-2 Hour Cool Down after Force Drying. Follow Force drying procedures below.

#### **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. 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.

#### **Blending – Dry Edges**

Dry Edges can be blended in Reducing the PRO-4500 ClearCoat by 100%-150% using a High Grade Slow Urehtane Reducer and Lightly misting the area to be blended out.

## **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>	PRO-4560	<u>PRO-4570</u>	<u>PRO-4580</u>	
Flash Time	5 min	10 min	10 - 15 Min	
Dust Free	8 - 10 min	10 - 15 min	15 – 20 Min	
Polish	1 - 1½ hours	1½ - 2 hours	2 Hours +	
To Deliver	2 - 3 hours	3 hours	4 Hours +	

#### Force Dry Times

Allow 5 -15 minutes flash time of final coat of clear when using infrared or radiant heat.

#### **Temperature**

120'F (15 Min) 140'F (7 – 10 Min)

#### Note: The use of infrared heat lamps is not recommended.

#### <u>Buffing</u>

If buffing is needed to remove dirt, allow the clearcoat to dry  $1\frac{1}{2}$  - 2 hours depending on temperature then wet sand with 1000-1500 grit sandpaper followed by 2000 grit sandpaper. When all 1000-1500 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 Package Ready to Spray Volume Solids Package Ready to spray VOC @ Gun Viscosity @ Gun

39.8% 40.3% 36.9% 35.7% 3.9 lb/gl 16-19 sec #2 Zahn Mixing Ratio Air Pressure @ Gun Recommended Film Thickness Flash Point Gloss DOI Potlife Coverage Ready to Spray 4/1 45-50 psi 2.0 - 3.5 mils 72'FTCC 90+ Excellent 3 to 6 hours 575 sq ft

# **Performance Data**

Flexibility	Excellent	Direct Impact	Excellent	Chip Resistance	Excellent
Salt Resistance	Excellent	Humidity Resistance	Excellent	Hardness	ЗH