

Delstar® / Delthane® Polyurethane Acrylic Enamel**DAR**

The *Delstar® / Delthane® Ultra* (DAR/DXR80) Polyurethane Acrylic Enamel system is a single stage system designed for panel repair, overall refinishing or as a fleet finish. It resists the elements and retains color and gloss.

Delstar / Delthane provides more durability and depth of gloss than the enamels of the past. When repairing or refinishing older vehicles, *Delstar / Delthane* can provide the texture and color of their original finishes.

Compatible Surfaces***Delstar / Delthane* may be applied over:**

- OEM & Refinish Lacquers (Must be sanded & sealed)
- OEM Basecoat/Clearcoat (Must be sanded)
- OEM Enamels (Must be sanded)
- DPLF Epoxy Primer
- DPX170/171 Non-Chrome Self Etching Primer
- DPX801 Universal Plastics Adhesion Promoter
- DX 1791/1792 Self Etching Primer
- DZ *Kondar*® Acrylic Primer Surfacer
- DX54 *Roadguard*® Chip Resistant Coating
- K36 *Prima*® Acrylic Urethane Primer Surfacer
- K36 *Prima* Acrylic Urethane Wet-On-Wet Sealer
- K38 High Build Primer Surfacer
- K93 Tintable Primer Surfacer/Sealer
- NCP250 *NCT*® Primer Surfacer
- NCP270/271 Corrosion Resistant Primer
- NCP272 Tintable Corrosion Resistant Primer
- NCP280 2.1 VOC Primer Surfacer
- NCS1990 Compliant Wet-On-Wet Sealer
- NCS1996 LOW VOC SEALER
- NCS2000 Series Sealer
- SX1050 & SXA1050 Plastic Adhesion Promoter
- SX1056 Flexible 2K Sealer
- SX1057 Flexible 2K Surfacer
- SX1060 Rollable 2K Primer Surfacer

Product Information Effective 10/03

Required Products

	Hardener
<i>Delthane Ultra</i> Urethane Hardener	DXR80
Urethane Hardener	DU5
Acrylic Enamel Reducers	
Fast (below 65°F)	DTR600
Moderate Temperature (60–75°F)	DTR601
Medium Temperature (70–90° F)	DTR602
Hot Temperatures (85°F & Above)	DTR604

DTR 607 Retarder may be used in place of up to 25% of the reducer in higher temperatures.



DAR

Directions For Use

Surface Preparation And Cleaning:



DAR colors are designed to be applied over properly cleaned, sanded and primed surfaces.

- Wash painted surfaces thoroughly with soap and water to remove water-soluble contaminants. Then clean with appropriate DX Cleaner (see P-178) or SX1005 0.4 VOC Cleaner (see PD-733).
- Sand with 280 grit sandpaper or equivalent.
- Re-clean with DX Cleaner or SX1005 0.4 VOC Cleaner. Prime or seal as needed.

Mixing Ratios:



Standard Option

Reduce **Delstar**[®] with the **DTR Reducer** best suited for shop conditions and add **Delthane**[®] **DXR80 Hardener** using the following ratio:

DAR Color	:	DTR Reducer	:	DXR80
8	:	3	:	1

Pot life of the mixture is 8 hours at 70°F (21°C).



DU5 Option

DU5 may be used for faster dry and better buffing:

		DTR or		
DAR Color	:	DT* Reducers	:	DU5
4	:	1	:	1

**DT Reducers may only be used with DU5 and only with the 4:1:1 ratio.*

Pot life of the mixture is 8 hours at 70°F (21°C).



Flexing Option

DU5 may be used for faster dry and better buffing:

DAR Color	:	DTR Reducer	:	DX814	:	DXR80
8	:	4	:	2	:	1

Pot life of the mixture is 8 hours at 70°F (21°C).

Tinting:

DAR color may be tinted up to 10% with DMR or another DAR color.

Additives:



DX84 Accelerator, DX87 Extender or DXR81 Accelerator may be added at 1/2 oz. per RTS qt. (Mixture may result in RTS VOC above 5.00)

DX 73 Fisheye Eliminator, when necessary, can be used in DAR

Color up to 1/2 oz. per RTS qt. Surface to be painted must be thoroughly cleaned.

Silicone additives should never be used unless positively necessary as flow-out of paints is decreased in direct relation to the amount used.

Spraygun Set-up:

Apply:	2–3 full wet coats or until hiding is achieved	
Film Build Per Wet Coat:	3.6–4.6 mils	
Dried film Build Per Coat:	1.2–1.4 mils	
Fluid Tip:	1.3–1.7 mm or equivalent	
Spray Viscosity:	20–29 seconds #2 Zahn cup	
Air Pressure:	8–10 PSI at the cap for HVLP guns 55–60 PSI at the gun for conventional guns	

Drying Times:

	w/DXR80	w/DU5
Between Coats:	15–20 minutes	5–10 minutes
Dust Free:	40–50 minutes	20–30 minutes
Tack Free:	3 hours	2 hours
Tape Free:	6–8 hours	6–8 hours
Purge Time:	0–10 minutes	0–10 minutes
Force Dry:	40 minutes at 140°F	40 minutes at 140°F
IR (Infrared):	Medium Wave Short Wave	10–15 minutes depending on color 7–9 minutes depending on color
Put in Service:	Overnight @ 70°F or after bake + 8 hrs.	Overnight @ 70°F or after bake + 8 hrs.

Blending:

Option 1—A two gun system is recommended when performing a spot repair. After each coat of color, mist the overspray edge with the second gun containing DX840 or DX830. **DO NOT** over wet the edge.

Option 2—*Delstar*[®] Color may also be blended by mixing the RTS color in your gun cup with an equal amount of DX840 or DX830. Apply this “over” reduced material to the dry edges. If additional blending is necessary, reduce the blend mixture with another equal part of DX840 or DX830.

Polishing:

After 24 hours @ 70°F (21°C) solid colors can be sanded with 1200–2000 grit sandpaper and compounded. In all cases, use a fine compound and polishing pad.

Repair and Recoat:

Delstar / *Delthane*[®] *Ultra* (DAR/DXR80) may be recoated with itself after a minimum of 4 hours air dry @ 70°F (21°C), but preferably overnight. DAR/DXR80 may also be recoated following a force dry for 40 minutes @ 140°F (60°C).

Clearcoating:

If desired, a clearcoat can be applied to provide additional long term durability or wet-look appearance. The recommended clears are:

- DCU2002 *Concept*[®] Urethane Clear
 - DCU2021 *Concept* Urethane Clear
 - DCU2042 Low VOC Speed Clear
 - DC3000 *Deltron*[®] High Velocity Clear
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Note: The color must dry a minimum of 4 hours before clearcoating.

Directions For Use

Technical Data:	VOC (PKG) lbs. per US Gal.	4.75 max
	VOC (RTS) lbs. per US Gal.	5.0 max
	Total Solids by Volume (RTS)	31–38%
	Sq. Ft. Coverage / US Gal. (1 mil @ 100% Transfer Efficiency)	500–600
	Film build per wet coat	3.6–4.6 mils
	Dry film build per coat	1.2–1.4 mils
	Recommended dry film	2–3 mils

Important: The contents of this package must be blended with other components before the product can be used. Before opening the packages, be sure you understand the warning messages on the labels of all components, since the mixture will have the hazards of all its parts. Improper spray technique may result in a hazardous condition. Follow spray equipment manufacturer's instructions to prevent personal injury or fire. Follow directions for respirator use. Wear eye and skin protection. Observe all applicable precautions.

See Material Safety Data Sheet and Labels for additional safety information and handling instructions.

EMERGENCY MEDICAL OR SPILL CONTROL INFORMATION (304) 843-1300; IN CANADA (514) 645-1320

Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to PPG Industries. Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results, or fitness for any intended use, nor does PPG Industries warrant freedom from patent infringement in the use of any formula or process set forth herein.

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