



**PDS N5.9.1**

**March 2005**

**P190-643**

## ***HS CLEARCOAT***

### **PRODUCT DESCRIPTION**

**P190-643** is a premium quality High Solids Acrylic Urethane Clearcoat. When combined with Nexa Autocolor Hardeners and Thinners, HS Clearcoat provides an easy to apply, smooth and glossy finish.

- Easy Application = consistent results
- HS Clearcoat System = labor and material savings
- Versatility = Performance in multiple environments

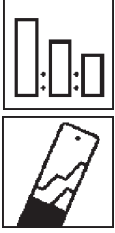
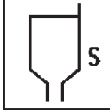


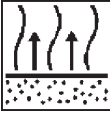

## **HS CLEARCOAT**

### **PRODUCTS**

<i>P190-643</i>	<i>HS Clearcoat</i>
<i>P210-854</i>	<i>HS Hardener - Low-Mid Temperature</i>
<i>P210-856</i>	<i>HS Hardener - Mid Temperature</i>
<i>P210-857</i>	<i>HS Hardener - High Temperature</i>
<i>P850-1692</i>	<i>Thinner - Low Temperature</i>
<i>P850-1693</i>	<i>Thinner - Mid Temperature</i>
<i>P850-1694</i>	<i>Thinner - High Temperature</i>
<i>P850-1695</i>	<i>Thinner - Very High Temperature</i>
<i>P275-350</i>	<i>HS Topcoat Accelerator</i>

**THESE PRODUCTS ARE FOR THE PROFESSIONAL PAINTING OF AUTOMOTIVE VEHICLES ONLY**

# PROCESS

	HS Express	HS
<b>MIX RATIO</b> 	<p><b>Clearcoat</b> P190-643            4 parts</p> <p><b>Hardener</b> P210-854            2 parts</p> <p><b>Thinner</b> P850-16XX           1 part</p> <p><b>Accelerator</b> P275-350            10%</p> <p><b>Note:</b> Express process can only be mixed with P210-854 Hardener.</p>	<p><b>Clearcoat</b> P190-643            4 parts</p> <p><b>HS Hardener</b> P210-85X            2 parts</p> <p><b>Thinner</b> P850-16XX           1 part</p>
<b>VISCOSITY &amp; POT LIFE</b> 	<p><b>Viscosity:</b> 14-16 seconds DIN 4 @ 70°F (21°C)</p> <p><b>Pot Life:</b> 2 hrs. @ 70°F (21°C)</p>	<p><b>Viscosity:</b> 16-17 seconds DIN 4 @ 70°F (21°C)</p> <p><b>Pot Life:</b> 4 hrs. @ 70°F (21°C)</p>
<b>SPRAY GUN &amp; AIR PRESSURE</b> 	<p><b>Siphon:</b> 1.4-1.8mm (.055" - .070") 50-55 psi at the gun.</p> <p><b>Gravity:</b> 1.3-1.6mm (.050" - .063") 50-55 psi at the gun.</p> <p><b>HLVP:</b> 0.8-1.5mm (.031" - .059") Max 10 psi cap press. 3-8 psi fluid press. (pressurised cup)</p>	<p><b>Siphon:</b> 1.4-1.6mm (.055"-.063") 50-55 psi at the gun</p> <p><b>Gravity:</b> 1.3-1.6mm (.050" - .063") 50-55 psi at the gun</p> <p><b>HLVP:</b> 0.8-1.5mm (.031" - .059") Max 10 psi cap pressure 3-8 psi fluid pressure (pressurized cup).</p>
	(HLVP: Refer to gun manufacturer's recommendations for required inlet pressure.)	
<b>APPLICATION</b> 	<p><b>2 single coats</b> (approx. 2.5 mils)</p>	<p><b>2 single coats</b> (approx. 2.5 mils)</p>
<b>FLASH TIME</b> 	<p><b>5-10 minutes</b> between coats</p> <p><b>Note:</b> No flash-off is necessary before force drying.</p>	<p><b>5-10 minutes</b> between coats.</p> <p><b>Note:</b> No flash-off is necessary before force drying.</p>
<b>DRYING TIME</b> 	<p><b>Air Dry @ 70°F (21°C)</b> Dust Free        10 min. Handle            2 hrs. Polishing        4 hrs</p> <p><b>Force Dry @ 140° (60°C)</b> <b>(metal temperature)</b> 10 minutes</p>	<p><b>Air Dry @ 70°F (21°C)</b> Dust Free        10-15 min. Handle            4-6 hrs Polishing        12-16 hrs</p> <p><b>Force Dry @ 140° (60°C)</b> <b>(metal temperature)</b> P210-854        20 min. P210-856        30 min. P210-857        40 min.</p>

# HS CLEARCOAT

## WEIGHT MIX RATIOS FOR P190-643

HS Clearcoat P190-643 4:2:1			Mix Ratio By Weight (Cumulative Weight in Grams)			
Product	Ratio		1/2 Pint	1 Pint	1 Quart	2 Quart
HS Clearcoat P190-643	4		129	258	516	1032
HS Hardener P210-854/6/7	2		197	393	786	1572
Thinner P850-16XX	1		223	447	893	1786

HS Clearcoat P190-643 4:2:1:10% Express			Mix Ratio By Weight (Cumulative Weight in Grams)			
Product	Ratio		1/2 Pint	1 Pint	1 Quart	2 Quart
HS Clearcoat P190-643	4		117	235	469	938
HS Hardener P210-854	2		179	358	715	1430
Thinner P850-16XX	1		203	406	812	1624
Accelerator P275-350	10%		223	447	893	1786

**Note:** Express process can only be mixed using P210-854 Hardener.

**Note:** These weights will produce approximately 97.5% of the volume stated to allow for mixing. If an exact quart, pint, half-pint, etc. is required, multiply all weights by 1.025. All weights have been rounded off to whole numbers.

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## EQUIPMENT CLEANING

HS Clearcoat (P190-643) can be applied over 2K™ Basecoats after allowing proper dry time.

When using over plastic substrates refer to “Plastics Painting Process,” PDS N7.1.

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## RECOATABILITY

HS Clearcoat (P190-643) used with HS Hardeners (P210-854, P210-856 or P210-857) are fully recoatable after 16 hours air dry 70° F (21°C).

HS Clearcoat (P190-643) when force dried for recommended times is fully recoatable after cooling down.

# HS CLEARCOAT

## POLISHING

Polishing is not normally required. If however polishing is required to remove minor dirt nibs, wet sand with P1500 wet and follow normal polishing procedures.

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## PROCESS NOTES

For optimum performance, paint systems should not be applied cold. For best results allow adequate time for paint to reach 70° F (21°C).

For blending of HS Clearcoat (P190-643) refer to PDS N7.3

In the event of fish-eyes, add 1-2 inner capfuls of P273-1086 (Fish-Eye Preventer) to 1 quart of HS Clearcoat (P190-643) Ready-for-Use.

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## EQUIPMENT CLEANING

Approved cleaning solvents

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## 2K™ PERFORMANCE SPECIFICATIONS

<b>Product:</b>	P190-643 HS Clearcoat
<b>Category:</b>	Topcoat
<b>VOC As Packaged:</b>	4.02 lbs. per gal/482gm/l
<b>VOC (RFU):</b>	4.30 lbs. per gal/515 gm/l (Maximum)
<b>Product:</b>	P273-1086
<b>Category:</b>	Specialty
<b>VOC As Packaged:</b>	7.2 lbs. per gal/862 gm/l
<b>Clearcoat Data:</b>	
<b>Weight Solids (RFU):</b>	47.1% @ 4:2:1/ 44.8% @ 4:2:1:10%
<b>Volume Solids (RFU):</b>	40.1% @ 4:2:1/ 40.3% @ 4:2:1:10%
<b>Pencil Hardness:</b>	2H*
<b>Chemical Resistance:</b>	Excellent *

\*Test Methods: ASTM D3363-74 and ASTM D1308-97

For further information please contact:

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