

Product Data Sheet

May 2012

INTERNATIONAL MASTER
FOR PROFESSIONAL USE ONLY

J0631

2K HS Clearcoat P190-643

<i>Product</i>	<i>Description</i>
P190-643	2K HS Clearcoat
P210-842/-8430/-844/-845	2K HS Hardeners
P850-1490/1491/1492/1493/1494/1495	2K Thinners
P850-1401	Fade Out Thinner
P275-350	HS Topcoat Accelerator
P850-1621	Aerosol Fade-Out Thinner

Product Description

P190-643 is a high solids 2-Pack acrylic clearcoat. It offers a hard and durable finish with superb gloss and is suitable for all types of repair.

When used with the HS hardeners P210-842/-8430/-844/-845, P190-643 offers the flexibility to cope with a wide range of application conditions and temperatures. An express system using the HS Topcoat Accelerator P275-350 is available for customers needing rapid processing.

P190-643 is suitable for application with compliant, HVLP & conventional spray guns and can be used in 2 modes: Standard 2-coat application and "one visit" application, where 1 light coat followed by 1 full coat are sprayed with no flash-off between coats. This enables a reduction in process times to be achieved, combined with significant material savings.

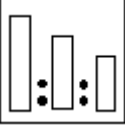







Substrates/Preparation

P190-643 should only be applied over: -

- P965-line Aquabase™ basecoat
- P989-line Aquabase Plus basecoat
- P422-line 2K basecoat
- Prepared existing paintwork in sound condition.

Existing paintwork should first be abraded (e.g. with Scotchbrite™ Ultrafine Grey with P562-106 if required), and cleaned with a suitable pre-cleaner prior to application of P190-643.

Process

	Standard / Express System (Medium sized repairs)	System for large areas and high temperatures																											
	P190-643 2 parts P210-842 1 part P850-149X 0.6 part P275-350 (<i>Express system</i>) + 5% (50ml per 1L mix)	P190-643 2 parts P210-8430/ -844/ -845 1 part P850-149X 0.6 part																											
	17-19 secs DIN4 at 20°C (20-24 secs BSB4)	17-19 secs DIN4 at 20°C (20-24 secs BSB4)																											
	Pot-Life at 20°C: 1 - 1.5 hours (standard system) 45 - 75 mins (express system)	Pot-Life at 20°C: 1.5 - 2 hours (P210-844) 1.75 – 2.5hrs (P210-845)																											
	Fluid tip : Suction Fed : 1.6-1.8 mm Gravity Fed : 1.3-1.6 mm Pressure : 3.3-3.7 bar (50-55 psi)	Fluid tip : Suction Fed : 1.6-1.8 mm Gravity Fed : 1.3-1.6 mm Pressure : 3.3-3.7 bar (50-55 psi)																											
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	1. Apply 2 single coats to give 50-60 microns (2-2.5 thou) dry film thickness (5-10 mins flash-off between coats) OR 2. Apply 1 light coat followed immediately by a full coat to give 50 microns dry film thickness. The first coat should be applied to all repair panels before the second coat is applied. For less than 3 panels, allow 2-3 minutes flash between spray coats. For more than 3 panels, no flash off is required.																												
	Bake at a metal temperature of: <table border="0"> <tr> <td></td> <td>P210-842</td> <td>+ P275-350</td> </tr> <tr> <td>50°C</td> <td>45 mins</td> <td>30 mins</td> </tr> <tr> <td>60°C</td> <td>30 mins</td> <td>20 mins</td> </tr> <tr> <td>Into Service :</td> <td colspan="2">When cool</td> </tr> </table> Air-dry (20°C) : Dust Free 10-15 mins 10 mins Handleable 4 hours 2 hours Into Service 12 hours 4 hours		P210-842	+ P275-350	50°C	45 mins	30 mins	60°C	30 mins	20 mins	Into Service :	When cool		Bake at a metal temperature of : <table border="0"> <tr> <td></td> <td>P210-8430/-844</td> <td>P210-845</td> </tr> <tr> <td>50°C</td> <td>60 mins</td> <td>80 mins</td> </tr> <tr> <td>60°C</td> <td>40 mins</td> <td>50 mins</td> </tr> <tr> <td>70°C</td> <td>30 mins</td> <td>40 mins</td> </tr> <tr> <td>Into Service :</td> <td colspan="2">When cool</td> </tr> </table> Air Dry (20°C) : Dust Free 15 mins Handleable 6 hours Into Service 16 hours		P210-8430/-844	P210-845	50°C	60 mins	80 mins	60°C	40 mins	50 mins	70°C	30 mins	40 mins	Into Service :	When cool	
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	Infra-red drying Short wave 8-15 mins full power (depending on colour and equipment)	Infra-red drying Short wave 8-15 mins full power (depending on colour and equipment)																											

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General Process Notes

FADE-OUT PROCESS

Apply clearcoat to the whole panel or up to a breakline. If "fading-out" the clearcoat make sure to cover the basecoat edge and only fade into the prepared surface. Any dry spray may be dissolved by applying P850-1401. Please refer to Fade-out process PDS for full basecoat/clearcoat fade-out process.

Alternatively, use P850-1621 Aerosol Fade-Out Thinner. See TDS M1000V for process.

TINTING

Certain basecoat colours require the use of a tinted clearcoat to achieve a colour match, as specified on the microfiche. Where this is required, P190-643 may be used as a tinted clearcoat by the addition of up to 20% of a limited range of 2K tinters, in accordance with the microfiche formulation.

Please refer to 2K Tinted clearcoat process PDS for details of how to achieve a colour match where a tinted clearcoat is required. When using a tinted clearcoat finish, a final coat of untinted clearcoat is recommended for maximum durability and protection of colour.

CHOICE OF HARDENER AND THINNER

P210-842 gives a standard bake system of 30 minutes at 60°C, for medium-sized repairs.

P210-8430 is suitable for all medium or larger repairs between 20-30°C

P210-844 is suitable for larger size repairs (bake time 40 minutes at 60°C), or use in high temperatures

P210-845 should only be used in very high temperatures (over 35°C)

The choice of thinner should be made according to application temperature, hardener choice, air movement and size of job. The recommendations below are for guidance only :-

Thinner	Ideal Temperature Range
P850-1490 Extra Fast	10-20°C
P850-1491 Fast	15-25°C
P850-1492 Medium	20-30°C
P850-1493 Slow	25-35°C
P850-1494 Extra Slow	30-40°C
P850-1495 High Temperature	35-45°C

In general use a slower thinner in fast air movement booths, for large jobs and for HVLP application. Use a faster thinner in slow air movement booths and for small jobs.

PAINT TEMPERATURE

As with other paint systems, optimum spray application is achieved if the paint is allowed to reach room temperature (20°C) before use. This is particularly important for high solids systems. It is strongly recommended that cold paint is warmed to a minimum of 15°C before application. Below this temperature paint application performance may be adversely affected.

General Process Notes

WEIGHT MIX GUIDE (cumulative)

Volume of RFU Paint required	Weight P190-643	Weight P210-842/-8430 -844 / -845	Weight P850-1490/-1491/-1492 / -1493/-1494/-1495	Weight P275-350 (if required for express system)
0.1 L	54.6g	82.4g	97.5g	102.1 (0.1L + 5%)
0.25 L	136.6g	205.9g	243.7g	255.2 (0.25L + 5%)
0.33 L	180.2g	271.8g	321.6g	336.9 (0.33L + 5%)
0.5 L	273.1g	411.9g	487.3g	510.4 (0.5L + 5%)
0.75 L	409.7g	617.8g	731.0g	765.6 (0.75L + 5%)
1.0 L	546.2g	823.7g	974.6g	1020.8 (1.0L + 5%)
1.5 L	819.3g	1235.6g	1461.9g	1531.2 (1.5L + 5%)
2.0 L	1092.4g	1647.4g	1949.2g	2041.6 (2.0L + 5%)
2.5 L	1365.5g	2059.3g	2436.5g	2552.0 (2.5L + 5%)

INFRA-RED DRYING

Drying times are dependent upon colour and equipment. Refer to manufacturer's instructions for set-up details. When using Aquabase basecoat, it is particularly important to ensure the basecoat is thoroughly dry before IR drying the clearcoat.

RECOATABILITY

P190-643 is fully recoatable after the "into-service" times.

RECTIFICATION AND POLISHING

Polishing is not normally required as P190-643 has a gloss finish. However, if dirt is a problem, denib with P1200 or finer, then polish by hand or machine using a quality polish such as the SPP Polishing System. (refer to SPP PDS). Polishing of 2K is easiest between 1 and 24 hours after "into service" times.

PAINTING PLASTICS

Use the standard **Nexa Autocolor** plastics painting system (refer to TDS).

OTHER POINTS TO NOTE

When using 2-pack products it is highly recommended to clean the gun thoroughly immediately after use.

These products are for professional use only and are not to be used for purposes other than those specified. The information on this TDS is based on present scientific and technical knowledge, and it is the responsibility of the user to take all necessary steps in order to ensure the suitability of the product for the intended purpose.

For Health and Safety information please refer to the material Safety Data Sheet, also available at: www.nexaautocolor.com

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