

Product Data Sheet

May 2012

INTERNATIONAL MASTER
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J2770V

HS Plus Clearcoat P190-7000

<i>Product</i>	<i>Description</i>
P190-7000	HS Plus Clearcoat
P210-8815	HS Plus Hardener
P850-1692/1693/1694/1695	2K Low VOC Thinners
P852-1689	2K HS Plus Express Thinner

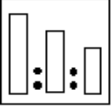

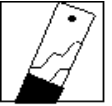



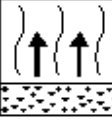


Product Description

P190-7000 has been designed with excellent wetting and flow from the gun, while reducing process times associated with medium or larger size repairs, through a 20 minute at 60°C bake process. Very good results can be achieved in older spraybooths or those that cannot reach full metal temperatures normally required by other clearcoats. Process options also include a 10 minute cycle for repair of smaller parts. The enhanced scratch resistance properties make this clearcoat an ideal choice when high durability is required together with an efficient repair process.

Substrates/Preparation

- P190-7000 should be applied only over: -
- P989 **Aquabase Plus** basecoats
 - Prepared existing paintwork in sound condition. Existing paintwork should first be abraded (E.g. with **Scotch-Brite™** Ultrafine Grey with P562-106) and cleaned with P980-251, P980-9010 or P980-8252 prior to application of P190-7000

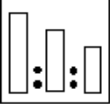








Standard Process

Standard Application System	
	P190-7000 3 parts P210-8815 1 part P850-16** series thinners 0.6 parts
	18-20 secs. DIN4 at 20°C
	Pot life at 20°C: 75 minutes It is recommended that the clearcoat is activated and thinned just prior to application.
	Fluid Tip Gravity Fed : 1.2mm Pressure : 0.7 bar/10 psi max (air cap)
	Fluid Tip Gravity Fed : 1.2-1.3 mm Inlet Pressure : Refer to spraygun manufacturers instructions, normally 2 bar/30 psi (inlet)
	Express Single Visit Process Apply 1 light/medium coat followed by a full coat to give 50 microns (2 thou) 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.
	0 - 5 minutes flash-off required before baking, depending on oven type
	Bake at a metal temperature of : <p style="text-align: center;"><u>P210-8815</u></p> 60°C : 20 minutes 50°C : 30 minutes Into service : When cool
	Short-wave : 8-15 mins full power (depending on colour and equipment). Metal temperature between 90°C and 100°C

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Super Express Process

Super Express System	
	P190-7000 3 parts P210-8815 1 part P852-1689 0.6 parts
	18-20 secs. DIN4 at 20°C
	Pot life at 20°C : 40 mins It is recommended that the clearcoat is activated and thinned just prior to application.
	Fluid Tip Gravity Fed : 1.2- 1.3 Pressure : 0.7 bar/10 psi max (air cap)
	Fluid Tip Gravity Fed : 1.2- 1.3 Inlet Pressure : Refer to spraygun manufacturers instructions, normally 2 bar/30 psi (inlet)
	Express Single Visit Process Apply 1 light/medium coat followed by a full coat to give 50 microns (2 thou) 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.
	0 - 5 minutes flash-off required before baking (depending on oven type)
	Bake at a metal temp. of : 60°C : - 10 minutes 50°C : - 20 minutes Into service : when cool
	Short-wave : 8 - 15 mins full power (depending on colour and equipment)



General Process Notes

FADE-OUT PROCESS

P190-7000 HS Plus Clearcoat may be faded-out using the **Aerosol Fade Out Thinner P850-1621** or **Express Blender P273-1105**. Please refer to the Fade-out / Blending Processes Technical Data Sheet M1000V for details of the technique to achieve a successful repair.

CHOICE OF HARDENER AND THINNER

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

P210-8815 For applications in all temperature conditions

Thinner :	Ideal temperature range :
P850-1692	Up to 25°C
P850-1693	20°C - 30°C
P850-1694	25°C - 35°C
P850-1695	above 30°C
P852-1689 Express Thinner	18-22°C for small jobs

In general use a slower thinner in fast air movement booths, for large jobs and for high temperature application. Use a faster thinner in slow air movement booths, for small jobs and application at cooler temperatures.

PAINT TEMPERATURE

As with other paint systems, optimum spray application is achieved if the paint is allowed to reach room temperature (20-25°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.

INFRA-RED DRYING

Drying times are dependent upon colour and equipment. Refer to manufacturer's instructions for set-up details. When using Aquabase Plus basecoat, it is particularly important to ensure the basecoat is thoroughly dry before applying the clearcoat. Use P210-8815 hardener and P850-1694 combination.

Setting for metal temperature from 90°C to 100°C.

RECOATABILITY

P190-7000, in both standard and express modes, is fully recoatable after the "into-service" times.





General Process Notes

RATIOS FOR TEXTURE AND FLEXIBLE OPTIONS

The addition of P565-7210/7220 can be used to give a textured finish. For use over flexible substrates, P100-2020 should also be used.

Note: The majority of plastics used on cars are considered **Rigid**. These plastics may have some flexibility when painted off the car, but are rigid once mounted. HS+ Clearcoats only require the addition of the Flexible Additive (See **Flexible** chart below) when painting very flexible plastics, mostly found on older vehicles, e.g. foam type.

The following tables, gives a **1L WEIGHT MIX** for various topcoat appearances, ready to spray. The weights in grams are cumulative. **DO NOT TARE** the scale between additions.

Substrate	Appearance	P190-7000	P565-7210	P565-7220	P100-2020	HS Hardener	Thinner 1692/3/4/5
Rigid	Gloss	652g				883g	990g
	Fine Textured	267g	590g	-	-	732g	950g
	Coarse Textured	375g	-	672g	-	871g	973g
Flexible	Gloss	577g	-	-	663g	899g	1008g
	Fine Textured	207g	508g	-	604g	824g	965g
	Coarse Textured	300g	-	538g	677g	890g	972g

RECTIFICATION AND POLISHING

Polishing is not normally required as P190-7000 has a gloss finish. However, if dirt is a problem, denib with P1200 followed by P 1500 and finished with Trizact P3000 or similar , then polish by machine using a quality polish such as SPP Polishing System (refer to SPP PDS)combined with the lamb's wool pad at minimum speed to avoid surface becoming too hot. If heating occurs allow it to cool down before continuing the polishing process. .

Polishing of P190-7000 is easiest between 1 and 24 hours after "into service" drying times.

PAINTING PLASTICS

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

OTHER POINTS TO NOTE

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

General Process Notes

GUIDELINES FOR WEIGHT MIXING

Where a specific volume of clearcoat mix is required, this may be best achieved by weight mixing, using the guidelines below.

The weights are cumulative - please do **NOT** tare the scale between additions.

WEIGHT MIX GUIDE WITH P850-1692/3/4/5 and P852-1689

Volume of RFU Paint(Litres)	Weight P190-7000	Weight P210-8815	Weight P850-1692/1693/1694/1695 or P852-1689
0.10 L	65	88	100
0.20 L	130	176	200
0.25 L	163	220	250
0.33 L	216	290	330
0.50 L	328	440	500
0.75 L	490	660	750
1.0 L	650	880	1000
1.5 L	975	1320	1500
2.0 L	1300	1760	2000
2.5 L	1630	2200	2500



General Process Notes Best Practices with UHS Products

Paint storage conditions

Keep ready for use paint in good conditions to ensure correct viscosity.

RFU temperature above a minimum of 15°C, and ideally over 18°C.
This includes paint, hardeners and thinners.

Mixing and making ready for use

Activate accurately, and by weight where ever possible.

Where mixing must be by volume, only use a round and parallel sided mixing container together with the correct mixing stick. If using a measuring container marked in percentages, you must be sure that the percentages give the correct quantities.

Make sure that Hardeners and Thinners are mixed in well. High solids or high viscosity products can take a little longer to mix in, so a good practice is to stir Hardener in first, then add thinner before stirring again.

Use mixed product as quickly as possible.

Choose the correct Hardener for the required bake cycle.

Keep to the recommended levels of additives.
Do not exceed the recommended level of additives such as Flexibilisers.

Application technique, process and equipment choices

Use correct spraygun set ups, and set up the spraygun correctly.

Use a "Single Visit" application wherever possible, following the advice given in the application section.

Check that the spraybooth is operating effectively. If necessary make an oven check to be sure that metal temperature is reached, especially on low down repair areas.

Nexa Autocolor recommendations are based on time at metal temperature, so this should be allowed for in the bake cycle that is set for the job.



VOC INFORMATION

The EU limit value for this product (product category: IIB.d) in ready to use form is max. 420g/litre of VOC. The VOC content of this product in ready to use form is max. 420g/litre. Depending on the chosen mode of use, the actual ready to use VOC of this product may be lower than that specified by the EU Directive code.

Note:

Combinations of this product with P565-554, P100-2020, P565-7210 or P565-7220 will produce a paint film with special properties as defined by the EU Directive code.

In these specific combinations: The EU limit value for this product (product category: IIB.e) in ready to use form is max. 840g/litre of VOC. The VOC content of this product in ready to use form is max. 840g/litre.

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

For further information please contact:

Customer Service Sales Group
PPG Industries (UK) Ltd
Needham Road
Stowmarket
Suffolk IP14 2AD

Tel: 01449 771771

Fax: 01449 773472

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