

Product Data Sheet

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INTERNATIONAL MASTER
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J2570V

2K HS Plus Express Clearcoat P190-6659

<i>Product</i>	<i>Description</i>
P190-6659	2K HS Plus Express Clearcoat
P210-872	2K HS Plus Hardener - Fast
P210-875	2K HS Plus Hardener - Medium
P850-1492/-1493/1494	2K Thinners
P850-1692/1693/-1694	2K Low VOC Thinners
P852-1689	2K HS Plus Express Thinner

Product Description

P190-6659 is a fast drying high solids 2-pack express clearcoat. It offers a rapid process for small repairs, and can be used over rigid plastics without the need of a flexible additive.

P190-6659 2K HS Plus Express Clearcoat system comes with a 15 minute bake option at 60°C, for use on between 1 and 3 panels. There is also a Super Express 10 minute bake option at 60°C for single panel / spot repair and a Standard 30 minute bake at 60°C option for larger repairs up to 25°C. For optimum final appearance the 15 or 30 minute options are recommended depending on the type of repair.

P190-6659 can be used in two modes, "one visit" application where 1 light/medium flowing coat is followed by a full coat with no flash-off between coats or a standard 2-coat application

Substrates/Preparation

- P190-6659 should be applied only over: -
- P965-line **Aquabase™** basecoat
 - P989-line **Aquabase Plus** basecoat
 - Prepared existing paintwork in sound condition. Existing paintwork should first be abraded (E.g. with **Scotch-Brite™** Ultrafine Grey with P562-100 or P562-106) and cleaned with P980-251, P980-9010 or P980-8252 prior to application of P190-6659.



Innovating Repair Solutions

Process

	Super Express System	Express System	Standard System
	P190-6659 3 parts P210-872 1 part P852-1689 0.6 parts	P190-6659 3 parts P210-872 1 part P 850-1492/3/4 or -1692/3/4 0.6 parts	P190-6659 3 parts P210-875 1 part P 850-1492/3/4 or -1692/3/4 0.6 parts
	18-20 secs. DIN4 at 20°C	18-20 secs. DIN4 at 20°C	18-20 secs. DIN4 at 20°C
	20 - 30 minutes at 20°C	30 - 40 minutes at 20°C	40 - 50 minutes at 20°C
	<p align="center">Fluid Tip Gravity Fed : 1.2-1.4 mm Suction Fed : 1.4-1.6 mm Pressure : 0.7 bar/10 psi max (@ air cap)</p>		
	<p align="center">Fluid Tip Gravity Fed : 1.2-1.4 mm Suction Fed : 1.4-1.6 mm Inlet Pressure : Refer to spraygun manufacturers instructions, normally 2 bar/30 psi (inlet)</p>		
	<ol style="list-style-type: none"> Apply 1 light/medium flowing coat followed by a full coat to give 45 - 50 microns dry film thickness. Apply 2 single coats to give 50-60 microns dry film thickness 		
	Between coats: - Application 1. 2 - 3 minutes for 1 or 2 panels. Maximum 3 panels no flash off required OR Application 2. 3 -5 mins depending on spraybooth conditions and hardener/thinner combination used.		
	0 - 5 minutes flash-off required before baking, depending on oven type		



Process

	Super Express System	Express System	Standard System
	<p><u>P210-872 / P852-1689</u></p> <p>Bake at metal temp. of 60°C: - 10 minutes</p> <p>Into service : when cool</p> <p>Air-dry (20°C) :</p> <p>Dust free - 20-30 mins.</p> <p>Handleable - 4 hours</p> <p>Into Service - 12 hours</p>	<p><u>P210-872 / P850-1492/93/94 or1692/1693/1694</u></p> <p>Bake at metal temp. of 60°C : - 15 minutes</p> <p>Into service : when cool</p> <p>Air-dry (20°C) :</p> <p>Dust free - 20-30 mins.</p> <p>Handleable - 4 hours</p> <p>Into Service - 12 hours</p>	<p><u>P210-875 / P850-1492/93/94 or1692/1693/1694</u></p> <p>Bake at metal temp. of 60°C : - 30 minutes</p> <p>Into service : when cool</p> <p>Air-dry (20°C) :</p> <p>Dust free - 30-40 mins.</p> <p>Handleable - 6 hours</p> <p>Into Service - 16 hours</p>
	<p>Short-wave : 8-15 mins full power (depending on colour and equipment)</p>		



General Process Notes

FADE-OUT PROCESS

P190-6659 Express 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

- P210-872** Ideal for faster processing of panel repairs (e.g. up to 3 panels maximum) giving a 10/15 minute at 60°C metal temperature bake.
- P210-875** Ideal where optimum appearance is required, at application temperatures up to 25°C, giving a 30 minute at 60°C metal temperature bake.

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

	Thinner :	Temperature range :	Bake Schedule:
Standard For optimum gloss and appearance, over larger area repairs	P850-1492 / 1692 P850-1493/94 / 1693/94	below 25°C above 25°C	30 minutes at 60°C
Express system For optimum gloss and appearance	P850-1492 / 1692 P850-1493 / 1693	below 25°C above 25°C	15 minutes at 60°C 15 minutes at 60°C
Super Express system For fast panel / spot repairs	P852-1689	below 25°C	10 minutes at 60°C

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 or Aquabase Plus basecoat, it is particularly important to ensure the basecoat is thoroughly dry before applying the clearcoat.

RECOATABILITY

P190-6659 is fully recoatable after the "into-service" times.

RECTIFICATION AND POLISHING

Polishing is not normally required as P190-6659 has a gloss finish. However, if dirt is a problem, denib with P1500 or finer, then polish by machine using a quality polish such as SPP Polishing System (refer to SPP PDS). Polishing of P190-6659 is easiest between 1 and 24 hours after "into service" drying times.

USE OF P210-870, 2K HS Plus Hardener - Express

This Hardener can be used following the Super Express mixing recommendations above, but is only suitable for use below 25°C and on small areas such as small vertical panels or components where a high gloss finish is not required.

Pot Life is 15 minutes so this combination must be applied immediately after mixing and equipment must be cleaned as soon as application is finished.

Use on larger areas may lead to popping caused by the very fast cure rate.

This combination may be baked at 60°C for 10 minutes or air dried for 12 hours.

OTHER POINTS TO NOTE

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

General Process Notes

RATIOS FOR MATT, TEXTURE AND FLEXIBLE OPTIONS

Using P565-554, it is possible to reduce the gloss of P190-6659. 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.

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

Guide for using 2K Thinner P850-14**& 2K HS Plus Express Thinner P852-1689

Substrate	Appearance	P190-6659	P565-554	P565-7210	P565-7220	P100-2020	Hardener P210-872 or P210-875	Thinner - 1492, 1493,1494 or 1689
Rigid	Gloss	645g	-	-	-	-	875g	994g
	Semi-gloss	481g	724g	-	-	-	899g	987g
	Matt	386g	776g	-	-	-	916g	987g
	Fine Textured	287g	-	641g	-	-	745g	965g
	Coarse Textured	392g	-	-	708g	-	850g	970g

Note: 2K HS Plus Express Thinner, P852-1689 is not recommended in combination with P210-875 Hardener.

Guide for using 2K Low VOC Thinners P850-1692/1693

Substrate	Appearance	P190-6659	P565-554	P565-7210	P565-7220	P100-2020	Hardener P210-872 or P210-875	Thinner 1692/93/94
Rigid	Gloss	645g	-	-	-	-	875g	982g
	Semi-gloss	481g	724g	-	-	-	899g	980g
	Matt	386g	776g	-	-	-	916g	981g
	Fine Textured	287g	-	641g	-	-	745g	946g
	Coarse Textured	392g	-	-	708g	-	850g	960g



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 balance between additions.

WEIGHT MIX GUIDE WITH P850-14**or P852-1689 2K THINNERS

Target Volume of RFU Paint required (Litres)	Weight P190-6659	Weight P210-872/ 875	Weight P850-1492/1493 Or P852-1689
0.10 L	65 g	88 g	99 g
0.20 L	129 g	175 g	199 g
0.25 L	161 g	219 g	249 g
0.33 L	213 g	289 g	328 g
0.50 L	323 g	438 g	497 g
0.75 L	484 g	656 g	746 g
1.0 L	645 g	875 g	994 g
1.5 L	968 g	1312 g	1492 g
2.0 L	1291 g	1750 g	1989 g
2.5 L	1613 g	2187 g	2486 g

WEIGHT MIX GUIDE WITH P850-16**LOW VOC THINNERS

Target Volume of RFU Paint required (Litres)	Weight P190-6659	Weight P210-872/875	Weight P850-1692/1693/1694
0.10 L	65 g	88 g	98 g
0.20 L	129 g	175 g	196 g
0.25 L	161 g	219 g	245 g
0.33 L	213 g	289 g	324 g
0.50 L	323 g	438 g	491 g
0.75 L	484 g	656 g	736 g
1.0 L	645 g	875 g	982 g
1.5 L	968 g	1312 g	1473 g
2.0 L	1291 g	1750 g	1964 g
2.5 L	1613 g	2187 g	2454 g

Note: 2K HS Plus Express Thinner, P852-1689, is not recommended in combination with P210-875 Hardener.



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, P565-7210 or P565-7220 will produce a paint film with special properties as defined by the EU Directive code. The EU limit for these combinations in ready for use form is 840g/litre of VOC. The VOC content of this product in these combinations is max 840g/L.

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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