

Product Data Sheet

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INTERNATIONAL MASTER
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J1840V

2K Matt Clearcoat System

<i>Product</i>	<i>Description</i>
P190-1062	Clearcoat - Matt
P190-1063	Clearcoat – Semi Gloss
P210-842/8430/844/845	2K HS Hardener
P850-1492/1493/1494/1495	2K Thinners
P850-1693/1694/1695	2K Low VOC Thinner

Product Description

The clearcoats P190-1062 – Matt and P190-1063 – Semi Gloss, have been designed to reproduce the range of low gloss finishes found on components for use over Aquabase and Aquabase Plus.

The Nexa Autocolor Matt Clearcoat System is versatile 2K acrylic urethane clearcoats designed for the specialised repairs of vehicles or areas of vehicles originally finished with Matt or Low gloss clearcoat over a single or multistage colour basecoat system (e.g. Mercedes full body Matt Finish).

To allow for the normal gloss variations - due to colour, model, position of repair on vehicle etc., the actual mix of the two Clearcoats can be varied to match the vehicle to be repaired.

The P190-1062/-1063 or mixes may be used over rigid plastics without the need for special additives.

The P190-1062/-1063 Clearcoats can be used with HS hardeners P210-842/-8430/-844/-845.

Substrates/Preparation

When masking a repair, care should be taken to minimise direct contact of masking tape onto the original Matt finish. Where it is necessary to use masking tape directly on the original finish, the tape must be removed before baking to avoid marking of the original which may not recover.

P190-1062 / P190-1063 or mixes of the two can be applied over : -

- P989-line **Aquabase Plus** basecoat
- P965-line **Aquabase™** basecoat

The P190-1062/-1063 Clearcoats must be applied on top of a clean and dust-free basecoat. The light use of a tack cloth is recommended after the basecoat has flashed off.

Care should be taken to avoid dirt inclusion at all stages. Rectification of dirt inclusion in Matt or Low Gloss finishes is not possible after the final coat of clearcoat.

PROCESS

P190-1062/-1063 MIX RATIOS

To allow for normal variations in the gloss level, depending on colour, model, position of repair on vehicle, it is possible to mix the P190-1062 and P190-1063 together in any ratio to match the required gloss for a particular repair. The % ratio's quoted below are the best start point for the 5 gloss level ranges.

Gloss Level	MC01	MC02	MC03	MC04	MC05
	Matt e.g. Lamborghini full body Matt Finish		Low Gloss e.g. Mercedes, Smart, BMW, Fiat full body Matt finishes		Semi Gloss e.g. Older Mercedes Plastic side mouldings
Clearcoat	Percentage Parts by Weight (%)				
P190-1062	100	85	70	40	0
P190-1063	0	15	30	60	100

The resulting mix is then activated and thinned as below.

Note: Test panels MUST be produced using the intended hardener/thinner/ratio/spraygun combination to check for colour and gloss level against the vehicle to be repaired. P850-1492 / P850-1693 Thinners are recommended to only be used on small areas or components (Mirror covers etc.)

CHOICE OF THINNER

Smaller areas / Verticals / Higher Gloss
Below 25°C
Smaller Spraygun tip size



Faster Hardener/Thinner

Larger Areas / Horizontals / Lower Gloss
Above 25°C
Larger Spraygun tip size



Slower Hardener/Thinner



PROCESS

Standard Systems

	<p>By Volume</p> <p>P190-1062/-1063 3 parts P210-842/-8430/-844/-845 1 part P850-1693/4/5 or 1.5 parts P850-1492/3/4/5</p>	<p>By Weight</p> <p>See table, Page 5</p>
	<p>15 secs. DIN4 at 20°C</p> <p>Pot life at 20°C: 1 - 2 hours depending on hardener/thinner</p>	
	<p>Fluid Tip</p> <p>Gravity Fed: 1.2 - 1.4 mm</p> <p>Inlet Pressure: Refer to spraygun manufacturers instructions (normally 2 bar/30 psi inlet)</p>	
	<p>Application</p> <p>1 Full single coat, Flash off until evenly Matt all over + 1 Full single coat followed immediately by lighter (½ coat) cross coat. Flash off until evenly Matt all over before baking.</p>	
	<p>15 - 30 minutes, or until fully and evenly matt over the whole repair area*, flash-off is required between coats.</p> <p>15 - 30 minutes, or until fully and evenly matt over the whole repair area*, flash-off is required before baking.</p> <p>*Note: Allowing the Clearcoat to flash off fully between coats and before bake is important to achieve an even appearance and gloss level over the whole area. The actual flash off times will depend on the hardener/thinner combination required to achieve the correct gloss effect and could vary between 15 – 45 minutes.</p>	
	<p>With P210-842/8430/844 Hardener</p> <p>Bake at metal temp. of 60°C : 30 minutes</p> <p>Into service : When cool</p>	<p>With P210-845 Hardener</p> <p>Bake at metal temp. of 60°C : 40 minutes</p> <p>Into service : When cool</p>
	<p>Short-wave : 8-15 minutes, full power Medium-wave : 15 minutes, full power (depending on colour and equipment)</p>	

Product Data Sheet



General Process Notes

PAINT TEMPERATURE

As with all paint systems, optimum spray application is achieved if the paint, hardener and thinner, are allowed to reach room temperature (20-25°C) before use. This is particularly important for high solids systems. Application performance may be adversely affected if paint is allowed to cool to 15°C or below

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

P190-1062/-1063 are fully recoatable after the "into-service" times.

RECTIFICATION

To remove minor dirt inclusions in the final finish, the repair should be fully dried, de-nibbed after cooling and **one** further coat of the Clearcoat Mix applied. Care should be taken to avoid too high clearcoat film thicknesses because the final colour could be affected. In this situation, the repair will require sanding and recoating with Basecoat and Clearcoat.

Dirt removal from the final Matt Finish is not possible.

OTHER POINTS TO NOTE

The Gloss levels achieved with this clear may vary depending upon film thickness and application. Low film thickness and dry application will give a Lower Gloss. High film thickness and wet application will give a higher gloss level.

It is recommended that this clear be used for complete panel repair only.

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 balance between additions.

WEIGHT MIX GUIDE using 16xx thinners

Target Volume of RFU Paint required (Litres) @ 3/1/1.5	Weight P190-1062/P190-1063	Weight P210-842/8430/844/845	Weight P850-1693/1694/1695
0.10 L	57 g	75 g	97 g
0.20 L	113 g	150 g	194 g
0.25 L	142 g	187 g	243 g
0.33 L	187 g	247 g	321 g
0.50 L	284 g	374 g	486 g
0.75 L	425 g	561 g	729 g
1.0 L	567 g	748 g	972 g
1.5 L	851 g	1122 g	1458 g
2.0 L	1135 g	1496 g	1944 g
2.5 L	1418 g	1870 g	2430 g

WEIGHT MIX GUIDE using 14xx thinners

Target Volume of RFU Paint required (Litres) @ 3/1/1.5	Weight P190-1062/P190-1063	Weight P210-842/8430/844/845	Weight P850-1492/3/4/5
0.10 L	57 g	75 g	99g
0.20 L	113 g	150 g	199 g
0.25 L	142 g	187 g	248 g
0.33 L	187 g	247 g	328 g
0.50 L	284 g	374 g	497 g
0.75 L	425 g	561 g	745 g
1.0 L	576 g	748 g	994 g
1.5 L	851 g	1122 g	1490 g
2.0 L	1135 g	1496 g	1987 g
2.5 L	1418 g	1870 g	2484 g

General Process Notes

Repair of Full Body Matt Finishes – Blending the WB Basecoat

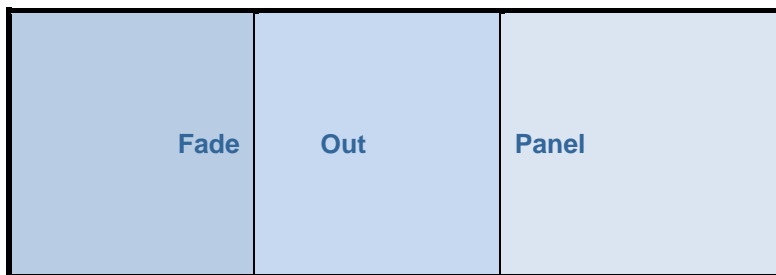
Fading out of the Matt Clearcoat itself is not possible because the resulting clearcoat edge cannot be successfully polished to give an invisible repair. However, depending on the colour (Lighter shades) and the effect of the OEM clearcoat, the WB basecoat layer can be faded out using the steps listed below, followed by Matt clearcoating to the next convenient panel edge.

Note: - For darker colours (especially black) depending on the impact of the OEM matt clearcoat on the overall colour match, it is possible that the repair clearcoat combined with the OEM clearcoat could affect the colour compared to the next panel. In such cases this blending technique may not be possible and complete panel repair with basecoat and clearcoat is a more practical option.

1. Prepare the whole panel to be faded onto up to the panel edge or to a break line.
2. Fade the normally thinned basecoat to approx. 30% across the fade out panel at reduced spraygun pressure.
3. Mix some of the remaining thinned basecoat in the gun pot, 1 part basecoat to 3 parts P990-8999 Clear Adjuster. Using the resulting basecoat mix, fade the basecoat further to approx. 60% across the fade out panel, again at reduced spraygun pressure.
4. Pour out the reduced basecoat from the previous step from the gun pot, leaving a small amount of colour on the sides of the pot. Then add enough P990-8999 for the application of 1 full coat to the fade out panel. Stir the mix to incorporate the small amount of basecoat colour to give the P990-8999 Clear Adjuster a slight tint.
5. Apply 1 full coat of the tinted Clear Adjuster layer over the whole of fade out panel, up to the edge where the Matt Clearcoat will be applied. This coat is applied at normal basecoat pressure.

This step will provide an even surface to apply the Matt Clearcoat over. Omitting this step will leave a basecoat edge which could result in uneven gloss levels across the panel.

6. Allow the basecoat to fully flash off as normal before applying the Matt Clearcoat.
7. Using the Matt Clearcoat mix established from the test panels to give to best gloss level match to the area of the vehicle being repaired, apply the Matt Clearcoat following the application recommendation given earlier.



General Process Notes

GENERAL CARE AND MAINTENANCE OF MATT FINISHES

The following guidance on Care and Cleaning of matt finish vehicles is aimed at the car owner, and applies to both the OE and the repair finish. Particular care must be taken with Matt Finishes to maintain an original even Matt effect.

Guidance for the car owner on maintaining the even matt effect over time

Matt/Gloss finishes can be relatively easily marked with general handling and day to day use (door/bonnet/boot opening, shoe scuffing on entry or exit of vehicle etc.). Care should be taken with these operations because marking or changing of the Matt effect could result.

Care should be taken to avoid spillage of fuel onto the Matt/Low Gloss finishes. Spilt fuel should be removed as soon as possible using the washing guidelines below, to avoid permanent damage or altering of the Matt/Low Gloss effect.

1. In order to keep the Matt surface effect, the use of paint cleaner, abrasives or polishes and wax polishes **must** be avoided. The vehicle **must** not be polished.
2. Polishing will lead to a higher, uneven gloss effect.
3. Cleaning/Polishing with unsuitable materials could alter the Matt effect (generally increased gloss).
4. Automated car washing machines should be avoided. The preferred car washing method is by hand with a soft sponge, neutral soap and lots of water. Too frequent car washing could over a period of time lead to increased and inconsistent gloss levels across a car panel. Washing under direct sunlight should be avoided.
5. Insects and bird residues should be removed immediately. The residues should be soaked in water to soften and/or removed carefully with a high pressure cleaning equipment. In the case of strongly adhered residues, a spray on insect remover should be used prior to washing.
6. Whenever using any type of cleaning fluids with soft sponges or cloths, it is essential not to apply pressure or rub the Matt finish. A gentle wipe/spray on, wipe off technique should be used. Applying pressure will alter the Matt effect and result in an uneven appearance.

VOC INFORMATION

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. 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.

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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