

# **Product Data Sheet**

May 2012

### INTERNATIONAL MASTER FOR PROFESSIONAL USE ONLY

**J0632** 

## 2K HS Clearcoat P190-643

| Product                            | Description              |
|------------------------------------|--------------------------|
| P190-643                           | 2K HS Clearcoat          |
| P210-832/-796/-798/-847            | 2K MS 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 |
| P565-554                           | 2K Matting Agent         |
|                                    |                          |

### **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 MS hardeners P210-832/-796/-798/-847, 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.

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### 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<sup>™</sup> Ultrafine Grey with P562-106 if required), and cleaned with a suitable pre-cleaner prior to application of P190-643.

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### 2K HS Clearcoat P190-643

| Process    |  |   |  |  |  |  |
|------------|--|---|--|--|--|--|
|            | Standard / Express System<br>(Medium sized repairs)  | System for larger areas and high temperatures   |  |  |  |  |
|            | P190-643       2 parts         P210-832       1 part         P850-149X       0.6 part         P275-350 (Express system)       + 5%   | P190-643         2 parts           P210-796/ -798/ -847         1 part           P850-149X         0.6 part   |  |  |  |  |
| ∏s         | (50ml per 1L mix)<br>17-19 secs DIN4 at 20°C<br>(20-24 secs BSB4)  | 17-19 secs DIN4 at 20°C<br>(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:<br>1.5 - 2 hours (P210-796/-798)<br>1.75 - 2.5hrs (P210-847)  |  |  |  |  |
| **         | 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)  |  |  |  |  |
| HVLP       | Fluid Tip :Gravity fed :1.3-1.7 mmSuction fed :1.6-1.8 mmPressure fed :1.0-1.2 mmPressure:10 psi max (air cap)   | Fluid Tip :Gravity fed :1.3-1.7 mmSuction fed :1.6-1.8 mmPressure fed :1.0-1.2 mmPressure :10 psi max (air cap)   |  |  |  |  |
|            | <ol> <li>Apply 2 single coats to give 50-60 microns (2-2 between coats)</li> <li>OR</li> <li>Apply 1 light coat followed immediately by a fu<br/>The first coat should be applied to all repair pa<br/>For less than 3 panels, allow 2-3 minutes flash<br/>For more than 3 panels, no flash off is required</li> </ol> | Il coat to give 50 microns dry film thickness.<br>nels before the second coat is applied.<br>between spray coats.   |  |  |  |  |
| $\bigcirc$ | Bake at a metal temperature of:           P210-832         + P275-350           50°C         45 mins         30 mins           60°C         30 mins         20 mins           Into Service :         When cool         30 mins   | Bake at a metal temperature of :           P210-796/-798         P210-847           50°C         60 mins         80 mins           60°C         40 mins         50 mins           70°C         30 mins         40 mins           Into Service :         When cool |  |  |  |  |
|            | Air-dry (20°C) :Dust Free10-15 minsHandleable4 hours2 hoursInto Service12 hours4 hours   | Air Dry (20°C) :<br>Dust Free 15 mins<br>Handleable 6 hours<br>Into Service 16 hours  |  |  |  |  |
|            | Infra-red drying<br>Short wave 8-15 mins<br>full power (depending on colour and equipment)   | Infra-red drying<br>Short wave 8-15 mins<br>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**

P210-832 gives a standard bake system of 30 minutes at 60°C, for medium-sized repairs.
P210-796 is suitable for all medium or larger repairs between 20-30°C
P210-798 is suitable for larger size repairs (bake time 40 minutes at 60°C), or use in high temperatures
P210-847 should only be used in very high temperatures (over 35°C)

The choice of this part chould be made according to application temperature, hordener choice

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.

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### **General Process Notes**

### WEIGHT MIX GUIDE (cumulative)

| Volume of<br>RFU Paint<br>required | Weight<br>P190-643 | Weight<br>P210-832/-796<br>-798 / -847 | Weight<br>P850-1490/-1491/-1492<br>/-1493/-1494/-1495 | Weight P275-350<br>(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.

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### 2K HS Clearcoat P190-643

**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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