Product Data Sheet

May 2016

INTERNATIONAL MASTER
FOR PROFESSIONAL USE ONLY

I0600V

Aquabase™ Plus
Waterborne Basecoat System

Product	*Description*
P989-line	Mixed Basecoat Colours
P990/991/992/993/994 995/996/998/999-lines	Aquabase Plus Mixing Basics
P998-8991	Aquabase Plus Tone Controller
P990-8999	Aquabase Plus Clear Adjuster
P935-1250	Aquabase Plus Performance Additive
P980-5000	Aquabase Plus Thinner
P980-5050	Aquabase Plus High Temperature Thinner

Product Description

Aquabase Plus is a high performance waterborne basecoat mixing scheme that significantly reduces solvent emissions into the environment and complies with all current and future legislative requirements.

Aquabase Plus is part of a complete product system offering comprehensive basecoat colour matching (metallics, pearls, solid colour basecoat and special effect finishes), excellent covering power and fade-out capability, therefore maintaining bodyshop productivity and profitability.

Coupled with high quality **Nexa Autocolor** clearcoats and primers, the Aquabase Plus system delivers excellent gloss, appearance and durability.
Easy to apply, this simple and flexible product system is capable of being used across a wide range of ambient conditions.

Substrates and Preparation

P989-line should only be applied over: -

Nexa Autocolor 2-pack flattable primers/undercoats

Nexa Autocolor 2-pack Wet-on-wet primers.

NOTE: On new panels coated in works primer/electrocoat it is recommended that a **Nexa Autocolor** 2-pack primer be applied.

Galvanised panels should be prepared using the recommended **Nexa Autocolor** system:

Etch Primer or 2K Epoxy Primer.

Prepared existing paintwork in sound condition:

Existing paintwork should first be flatted/abraded,

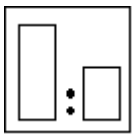
Wet flat with P800 or finer grade wet/dry paper or when dry sanding use P400 or finer.

The area into which blending is done should be flatted/abraded with Scotch-Brite™ Grey Ultrafine in combination with P562-100/P562-106. Clean flatted area with P980-8252.

Plastics: Use the recommended **Nexa Autocolor** system for painting plastics.

PROCESS

BASECOAT PROCESS

	Metallic & 2-stage Pearlescent/Special Effect Basecoats	Solid Colour Basecoats
	P989-colour 100 parts P980-5000/5050 15 - 20 parts Viscosity will vary with thinner level chosen, but optimum application viscosity is 22 – 26 seconds DIN4 at 20°C. Most flake colours give the best balance of application, opacity and drying when used with 20 parts P980-5000. For maximum opacity in dark colours, 10 parts P980-5000/5050 may be used if required. At high temperatures above 30°C, 30 parts P980-5000 or P980-5050 may be used to help with application, laydown and overspray absorption.	P989-colour 100 parts P980-5000/5050 10 parts Viscosity will vary with thinner level chosen, but optimum application viscosity is 22 – 26 seconds DIN4 at 20°C. Most solid colours give the best balance of application, opacity and drying when used with 10 parts P980-5000/5050 thinner. At high temperatures above 30°C up to 30 parts P980-5000 or P980-5050 may be used to help with application, laydown and overspray absorption.
	Always filter using nylon filters. (125 microns is recommended) Pot life of thinned colour: 3 months	Always filter using nylon filters. (125 microns is recommended) Pot life of thinned colour: 3 months
	Fluid tip: Gravity fed: 1.2-1.4 mm Pressure : Refer to gun manufacturer's instructions	Fluid tip: Gravity fed: 1.2-1.4 mm Pressure : Refer to gun manufacturer's instructions

Product Data Sheet

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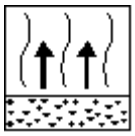
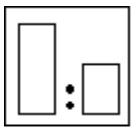
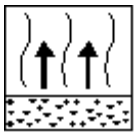
PROCESS

BASECOAT PROCESS (Continued)

	Metallic and 2-stage Pearlescent/Special Effect Basecoats	Solid Colour Basecoats
	**Method 1.** Apply single coats until opacity is reached. Apply a light control coat onto dry film for even flake appearance. For optimum flake laydown, apply control coat at 1.2 - 1.5 bar inlet pressure. Flash off thoroughly between coats **Method 2.** Apply as light even double coats until opacity is reached. Apply a light control coat onto dry film as above. **Method 3.** For optimum process speed, the control coat may be applied onto the “half dry” film once opacity is reached.	**Method 1.** Apply single coats until opacity is reached. Flash off thoroughly between coats **Method 2.** Apply as light even double coats until opacity is reached. Heavy application must be avoided or aeration/popping may result. Flash off thoroughly between coats
	Flash off until uniformly matt Use air movement equipment to accelerate drying as necessary, for example Fast Aquadry, floor stands or handguns. Choice of drying method will depend upon repair size and type.	Flash off until uniformly matt Use air movement equipment to accelerate drying as necessary, for example Fast Aquadry, floor stands or handguns. Choice of drying method will depend upon repair size and type.
 	Wait until uniformly dry before clearcoating. 3-5 minutes at half power or until matt. Do not apply the final control coat onto a hot panel. Allow 5 minutes for panel to cool before applying clearcoat. CLEARCOAT: Use only recommended **Nexa Autocolor** 2K Clearcoats. Refer to clearcoat TDS for details. It is not recommended to apply 1-Pack Clearcoat over Aquabase Plus Basecoat.	Wait until uniformly dry before clearcoating 3-5 minutes at half power or until matt. Allow 5 minutes for panel to cool before applying clearcoat. CLEARCOAT: Use only recommended **Nexa Autocolor** 2K Clearcoats. Refer to clearcoat TDS for details. It is not recommended to apply 1-Pack Clearcoat over Aquabase Plus Basecoat.

PROCESS

	3-STAGE PEARL/SPECIAL EFFECT PROCESS	
	P989- Groundcoat	**P989- Pearlcoat/Special Effect Colour**
	P989- 100 parts P980-5000/5050 10 parts Ideal viscosity 22-26 sec DIN4 Always filter using nylon filters. (125 microns is recommended)	P989- 100 parts P980-5000/5050 20 parts Ideal viscosity 22-26 sec DIN4 Always filter using nylon filters. (125 microns is recommended)
	Fluid tip: Gravity fed: 1.2-1.4 mm Pressure : Refer to gun manufacturer's instructions	Fluid tip: Gravity fed: 1.2-1.4 mm Pressure : Refer to gun manufacturer's instructions
	Apply single coats to opacity. Flash off thoroughly between coats. Avoid heavy application and excessive film builds.	Apply single coats based on colour check panels. This product is not designed to give opacity. Flash off thoroughly between coats.
	Flash off until uniformly matt. Use air movement equipment to accelerate drying as necessary, for example Fast Aquadry, floor stands or handguns. Choice of drying method will depend upon repair size and type.	Flash off until uniformly matt. Use air movement equipment to accelerate drying as necessary, for example Fast Aquadry, floor stands or handguns. Choice of drying method will depend upon repair size and type.
	Wait until uniformly dry before applying pearlcoat	Wait until uniformly dry before applying clearcoat.
CLEARCOAT	Use only recommended **Nexa Autocolor** 2K clearcoats. Refer to clearcoat TDS for details. It is not recommended to apply 1-Pack Clearcoat over Aquabase Plus Basecoat.	

Product Data Sheet

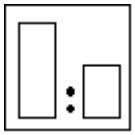
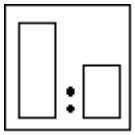
Innovating Repair Solutions

PERFORMANCE PROCESS

BASECOAT PROCESS

AQUABASE PLUS PERFORMANCE ADDITIVE – P935-1250

Performance Additive – P935-1250 has been developed as alternative to the standard Aquabase Plus Thinners to provide additional to protection in high risk areas of the vehicle e.g. on low profile front ends prone to stone chips, or in extreme conditions like driving at high speed on gravel roads, or when subjected to high pressure washing.

	Silver Metallic Basecoats (e.g. greater than 70% Aluminium Toner)	All Other Colour Basecoats
	P989-colour 100 parts P935-1250 10 parts P980-5000/5050 10 parts min. Viscosity will vary with thinner level chosen, but optimum application viscosity is 22 – 26 seconds DIN4 at 20°C. At high temperatures above 30°C, 20 parts P980-5000 or P980-5050 (i.e. an additional 10%) may be used to help with application, laydown and overspray absorption. Always filter using nylon filters. (125 microns is recommended) Pot life of thinned colour: 3 months	P989-colour 100 parts P935-1250 10 parts P980-5000/5050 5 parts min. Viscosity will vary with thinner level chosen, but optimum application viscosity is 22 – 26 seconds DIN4 at 20°C. At high temperatures above 30°C up to 20 parts P980-5000 or P980-5050 (i.e. an additional 15%) may be used to help with application, laydown and overspray absorption. Always filter using nylon filters. (125 microns is recommended) Pot life of thinned colour: 3 months
	P989- Groundcoat	**P989- Pearlcoat/Special Effect Colour**
	P989-colour 100 parts P935-1250 10 parts P980-5000/5050 5 parts min. Viscosity will vary with thinner level chosen, but optimum application viscosity is 22 – 26 seconds DIN4 at 20°C. At high temperatures above 30°C up to 20 parts P980-5000 or P980-5050 (i.e. an additional 15%) may be used to help with application, laydown and overspray absorption. Always filter using nylon filters. (125 microns is recommended) Pot life of thinned colour: 3 months	P989- 100 parts P935-1250 10 parts P980-5000/5050 10 parts min. Viscosity will vary with thinner level chosen, but optimum application viscosity is 22 – 26 seconds DIN4 at 20°C. At high temperatures above 30°C, 20 parts P980-5000 or P980-5050 (i.e. an additional 10%) may be used to help with application, laydown and overspray absorption. Always filter using nylon filters. (125 microns is recommended) Pot life of thinned colour: 3 months

Product Data Sheet

Innovating Repair Solutions

GENERAL PROCESS NOTES

SPECTRAL GREYS

Use of the specified Spectral Grey will ensure that the minimum volume of basecoat colour is used and that the basecoat process time is optimised. The recommendation for which Spectral Grey to use can be found on our colour communication systems (microfiche, e-fiche, On-Line Colour formulations and electronic balances). Where there is no Spectral Grey specified then SG05 should always be selected.

PREPARATION OF SUBSTRATE

Wet flat with P800 or finer grade wet/dry paper or when dry sanding use P400 or finer.

For the removal of water soluble salts and flatting residues produced by wet and dry flatting, use P980-8252 waterborne pre-cleaner

P980-8252 application:
Use one clean cloth for application and one clean cloth for wiping off contaminants.

Do not allow cleaning materials to dry on panel surfaces.

BASECOAT MIXING

Mix paint only in plastic containers. **DO NOT** use metal cans.
Gently invert cans twice before dosing.
Stir immediately after weighing all the ingredients specified.
DO NOT SHAKE. Cover container if left for any length of time before use.

COLOUR IDENTIFICATION AND CHECKING

As with all refinish paint systems, a colour check should be carried out before paint application.
Ensure mix is thoroughly stirred before carrying out colour check. This is particularly important with 3-Stage Pearlescent/Special Effect finishes, because their transparent nature means that a fade-out process is difficult.

Product Data Sheet

Innovating Repair Solutions

GENERAL PROCESS NOTES

EQUIPMENT CLEANING

Manual

Clean the gun using water in a suitable gun-cleaning machine. For gravity feed guns unscrew the paint cup (and filter if fitted) and rinse separately. Rinse gun through with clean water. Finally spray through with clean Aquabase Plus thinner P980-5000 and ensure that the gun is fully dry before storing or further use.

Automatic Gun Cleaning Machine (Aquabase Plus Gun Wash P980-8212)

Dis-assemble gun and place in waterborne gun cleaning machine as per manufacturer's instructions. After the cleaning cycle, clean off the gun parts and rinse with water. Assemble gun and spray through with Aquabase thinner P980-5000. Ensure gun is fully dry before storing or further use.

For the treatment and disposal of wastewater from the gun cleaning process refer to the appropriate PDS.

RECTIFICATION

Visible defects, e.g. dirt, are readily removed provided the basecoat is fully dry and the defect is dry denibbed using minimal pressure with P1500 wet/dry paper. It is preferable to remove defects before clearcoating. Once clearcoated, defects can only be removed when into-service times have been reached.

An alternative method is to use very fine grade fibre sanding pads e.g. Abralon 4000 either dry, or in combination with a small amount of Spirit Wipe (P850-14 or P850-1402) as a lubricant.

STORAGE

Store free from frost, above 4ºC

GENERAL PROCESS NOTES

FADE OUT REPAIRS

METALLIC, 2 STAGE PEARLS AND SOLID COLOUR BASECOATS

Preparation

Prepare the repair area in the appropriate Spectral Grey (SG01-SG07) as recommended on the colour recipe. Where no Spectral Grey is specified then SG05 should always be selected.
The specified Spectral Grey primer should be applied and flashed off in accordance with the appropriate PDS.
Application of the Spectral Grey as a primer is normally expected to give the best results. However in some circumstances Aquabase Plus can be used as a Spectral Grey ground coat. In such cases the best results will be seen with the darker greys, SG05-SG07.
Flat undercoated area (P800 wet or P400 dry). For rub-throughs to bare metal, apply P565-909/-908, P565-9081/9086.

Where an overspray edge is created for e.g. from the use of a wet on wet primer, the repair area should be denibbed to produce a feather edge using P800 wet or dry paper taking care to remove all primer overspray.

The area into which blending is done should be flatted/abraded with Scotch-Brite Grey Ultrafine in combination with P562-100 or P1200 wet. Alternatively, one of the fibre sanding pad systems may be used.
Clean flatted area with P980-8252 waterborne precleaner.

Complete Panel Repair

Mask out adjacent panel if necessary.
Apply basecoat to undercoated area as normal.
Remove any temporary masking and tack rag.
Fade further onto the adjoining panel. Apply final control coat for flake colours as normal.
Allow to dry uniformly before applying clearcoat.

Spot Repair:
(The Aquadry handgun can be used to speed up flash-off between coats)

Metallic and 2-Stage Pearlescent basecoats:

Paint prepared area to obliterate primed area. .
Reduce pressure at gun and fade further into surrounding area.
Flash off basecoat until uniformly dry. Apply final control coat before applying clearcoat.

Solid Colour Basecoat:

Paint prepared area to obliterate primed area fading each coat further into the surrounding prepared area.
Flash-off basecoat until uniformly dry before applying clearcoat.
For compliant guns apply as normal and when fading out reduce pressure as necessary.
The final pressure used will depend upon the brand of gun used.

GENERAL PROCESS NOTES

FADE OUT REPAIRS CONTINUED

3-STAGE SPECIAL EFFECT COLOURS

The transparent nature of 3-Stage colours means that a fade-out process is more difficult to achieve. Refer to the section below for details on the recommended fade out process. Alternatively, the fade-out process may be avoided either by a complete panel repair, or by using break lines to reduce the size of the area to be painted.

Preparation

Prepare the repair area in the appropriate Spectral Grey (SG01-SG07) as recommended on the colour recipe. Where no Spectral Grey is specified then SG05 should always be selected.
The specified Spectral Grey primer should be applied and flashed off in accordance with the appropriate PDS.
Application of the Spectral Grey as a primer is normally expected to give the best results. However in some circumstances Aquabase Plus can be used as a Spectral Grey ground coat. In such cases the best results will be seen with the darker greys, SG05-SG07.
Flat undercoated area (P800 wet or P400 dry). For rub-throughs to bare metal, apply P565-908/909 or P565-9081/9086.

Where an overspray edge is created for e.g. from the use of a wet on wet primer the repair area should be denibbed to produce a feather edge using P800 wet or dry paper taking care to remove all primer overspray.
The area into which blending is done should be flatted/abraded with P2000 grade wet/dry or an equivalent preparation system.

Clean flatted area with P980-8252 waterborne precleaner.

Complete Panel Repair

Ensure that a colour check has been carried out prior to the repair and that the number of coats required is known.

Groundcoat layer:

Apply groundcoat to the complete panel as normal.
Apply to opacity and fade into the adjoining panel as necessary.
Allow to dry uniformly.
Tak Rag before applying Pearlcoat.

Transparent effect layer:

Apply colour to the repair area making sure that the product extends beyond the Groundcoat.
Each coat should extend further into the repair area to ensure a good fade out edge.
Allow to dry uniformly before applying clearcoat.

Product Data Sheet

Innovating Repair Solutions

GENERAL PROCESS NOTES

FADE OUT OF 3-STAGE SPECIAL EFECT COLOURS CONTINUED

Spot Repair
(The Aquadry handgun can be used to speed up flash-off between coats)

Groundcoat layer:

Apply Groundcoat to prepared area to obliterate the primed area fading each coat into the surrounding area.
Tak Rag between coats.
Flash off Groundcoat until uniformly dry before applying transparent effect layer.

Transparent effect layer:

Apply the first coat of colour over the Groundcoat, extending the repair area beyond the groundcoat edge and further into the surrounding prepared area.
When applying the remaining coats of colour extend further into the repair area as required.
Allow each coat of colour to dry fully before further application.
Flash-off basecoat until uniformly dry before applying clearcoat.

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.

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 Heath 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

Product Data Sheet