October 2020 TDS: **RLD305V_DO**

Product Information

DELFLEET 2K Wet on Wet Undercoat F491x

PRODUCT

Delfleet 2K Wet on Wet Undercoat White G1	F4911
Delfleet 2K Wet on Wet Undercoat Grey G5	F4915
Delfleet 2K Wet on Wet Undercoat Dark Grey G7	F4917
UHS Hardener – Medium	F8255
UHS Hardener – Slow	F8254
UHS Hardener – Plural-Mix	F8251
UHS Thinner - Very Slow	F8363
UHS Thinner – Slow	F8364
UHS Thinner – Medium	F8365
UHS Thinner – Fast	F8366

PRODUCT DESCRIPTION

F491X, designed on the latest primer technology, can be used to optimise the priming process when used in combination with Envirobase HP and DELFLEET ONE® UHS High Performance Topcoat. It is designed to deliver a high quality final appearance through a non sand process that is equivalent to a sanded primer. Excellent application, very smooth flow and superb holdout properties are at the core of this product's performance.

Due to the excellent adhesion characteristics of F491X, no sanding of sound OE electrocoat is required, providing a very fast new panel process. F491X can be recoated directly after 25 minutes, or for up to 5 days with no sanding, so new parts can be primed in batches in advance with minimal preparation, and can be held ready for the topcoating process with the rest of the vehicle.

The strong adhesion and anti-corrosion characteristics mean that small rub throughs on electrocoated panels do not require the use of an epoxy primer before F491X is applied.

If large or exposed areas of bare metal are to be painted for best corrosion performance or for OEM warranty standard corrosion performance use a Wash Primer or an Epoxy Primer.

This undercoat can also be applied to E-coat and other recommended substrates.

PREPARATION OF SUBSTRATE- SANDING



F491X can be applied over a wide range of substrates including:

- Well cleaned unsanded Electrocoat.
- Bare steel areas up to 10 cm diameter without the need for an Epoxy Primer
- Galvanised Steel for rub throughs up to 10 cm maximum diameter
- Zintec for rub throughs up to 10cm maximum diameter
- Aluminium and alloys for rub throughs up to 10 cm maximum diameter
- Aged painted and original surfaces sanded with P320 or finer
- GRP, Fibreglass P120/ P240/P320
- Polyester Filler P120/ P240/P320

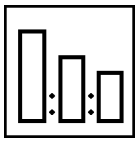
Note: For best corrosion performance Wash or Epoxy Primer should be applied prior to the application of F491X for areas of bare metal above 10cm diameter.



PREPARATION OF SUBSTRATE – DEGREASING

Before any preparation work, wash all surfaces to be painted with soap and water. Rinse and allow to dry before degreasing with a suitable PPG substrate cleaner. Ensure all substrates are thoroughly cleaned and dried before and after each stage of the preparation work. Always wipe substrate cleaner off the panel surface immediately, using a clean dry cloth.

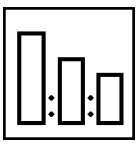
MIXING RATIOS



Mixing Ratios	By Volume:
Undercoat F491X	4
UHS Hardener F8254 / F8255	1
UHS Thinner	2

Recommended for very large surfaces and/or warm conditions:
F8254 or F8255 Hardener combined with F8363 UHS Thinner - Very Slow

MIXING RATIOS – Plural Mix Hardener



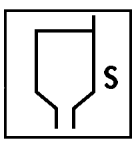
Mixing Ratios	By Volume:
Undercoat F491X	3
UHS Hardener F8251	1
UHS Thinner	1.2

For 2K Plural Mix equipment, it is recommended that F491X is pre-thinned 3 : 1.2 with thinner.
The thinned F491X should then be activated 4.2 : 1 with F8251 Hardener

MIXED PRODUCT DETAILS



Potlife at 20°C: 1 hour.



Spray viscosity at 20°C: 16 - 18 seconds DIN4

HARDENER AND THINNER SELECTION

Temperature	UHS Hardener	Thinner
Below 25ºC	F8255	F836*
		(*) according to the size of the object
25ºC - 30ºC	F8255	F8363
Over 30ºC	F8254	F8363

APPLICATION AND FLASH OFF



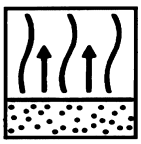
Spraygun set-up: 1.3 -1.4mm

Spray pressure: See spraygun manufacturers information



Number of coats: Apply 1 full single coat or 1 light + 1 full to give a film thickness of 25-35 microns (1.0 - 1.4 thou.)

Apply to achieve an even finish. Do not apply heavy coats.



Flash-off at 20°C:

Before topcoat 25 minutes to 1 hour according to film build

DRYING TIMES



- *Ready for topcoat*	25 minutes @20°C for 25-30 microns
- *Scotch brite and preclean*	Up to 24 hours
- *Light denibbing and precleaning*	After 3 days
- *Dry to sand at 60°C*	30 minutes
- *Dry to sand with Infra Red (Short Wave)*	5 min flash 10 min. cure

For use with IR please use slowest Hardener and Thinner options.

OVERCOATING



Overcoat / Re-coat time:	Minimum: 25 minutes – 1 hour.
	Maximum: 5 Days without sanding.
	Preclean before topcoating if left more than 8 hours.
	Light denibbing and precleaning is recommended if this primer is left more than 3 days before topcoating.
	If used for Spot repair as sandable primer, it is recommended that this primer should be force dried either at 60°C for 30 minutes or Infra Red dried. Once cool sand with P400 / 500 before overcoating.
Overcoat with:	Enirobase HP, any DELFLEET ONE® UHS Topcoat

Normally F491X does not require flatting and can be directly topcoated.
If some dirt inclusion occurs, light flatting/denibbing can be carried out after the first coat of basecoat using P800 with foam pad otherwise after force drying for any other need.

PROCESSING ALTERNATIVES

F491X is especially useful for painting batches of small parts ready for the topcoating process. The excellent flow characteristics allow the OE quality finish to be replicated without sanding.

F491X can be topcoated using the following alternatives:

- Flash off between 25 minutes and 1 hour.
- Light denibbing and precleaning is required after 8 hrs to prevent any workshop contamination from the environment from affecting the topcoat performance.

F491X CAN BE USED IN PRIMER FILLER MODE USING THE FOLLOWING RECOMMENDATIONS

Mix and use the gun set up as recommended in the main Process note.
Apply 1 light + 2 full coats
This gives a film thickness of approximately 60-70 microns

Bake for 30 minutes at 60°C metal temperature.
IR medium wave – 5 min flash off, followed by a 10 min cure time.

After cooling dry sand with P400 or finer

EQUIPMENT CLEANING

After use, clean all equipment thoroughly with suitable cleaning solvent or thinner.

PAINTING PLASTICS

F491X can be applied directly over well prepared and cleaned ABS, NORYL, PC/PBT, LEXAN, PUR and SMC, as well as sanded and pre-primed bumpers.

For bare plastic sections or rub through areas on bumpers, e.g. PP, TPO, PP/EPDM F491X should be primed with D820 Plastic Primer (see “CT Plastics System” recommendation) and flashed off 10 minutes before the application of Wet on Wet undercoat.

Panels should be prepared according to the Deltron cleaning and preparation of plastic substrate Product information sheet RLD241V

MIXING RATIOS FOR GREYMATIC SHADES

% by weight	G1	G3	G5	G6	G7
F4911	100	75	--	--	--
F4915	--	25	100	48	--
F4917	--	--	--	52	100

HEALTH AND SAFETY

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.ppgrefinish.com**

The EU limit for this product (product category:IIB.c) in ready for use form is max. 540g/l of VOC.

The VOC content of this product in ready for use form is max. 540g/l. 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.

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