



DFT-002

DELFLLEET® Evolution

FDGH

Single Stage High Solids Polyurethane Enamel

FDGH is a fast-drying, single stage, 3.5 VOC (max) polyurethane finish designed to maximize productivity in today's fleet refinishing operations. Choice of hardener and dry additive make FDGH adaptable to various shop conditions. FDGH is available in a wide range of solid and metallic colors and is out of dust in as little as 30 minutes and quickly cures to a high gloss finish that withstands severe fleet operating conditions. In addition, solid and metallic colors may be mixed as a flat, eggshell or semi-gloss finish.

Products

FDGH Color	FDGH
High Solids Hardener	F3259
High Solids BC Hardener - Fast Dry	F3260
Cool Temperature Reducer	F3311*
Fast Thinner	F3320
Medium Temperature Reducer	F3321*
Medium Thinner	F3330
Warm Temperature Reducer	F3331*
Slow Thinner	F3340
Hot Temperature Reducer	F3341*
Extra Slow Thinner	F3350
Very Hot Temperature Reducer	F3351*
Retarder	F3360
Exempt Solvent	F3385
Exempt Solvent – Medium	F3390
Exempt Solvent – Slow	F3395
Fast Dry Additive	F3400
Medium Dry Additive	F3405
Slow Dry Additive	F3410

Compatible Surfaces

FDGH may be applied over:

- Properly cleaned and sanded OEM enamels and cured finishes
- F3950 High Solids Epoxy Primer
- F3960 Pigmented Chrome Etch Primer (Must be sealed for optimum performance)
- F3963 Chrome Etch Primer (Must be sealed for optimum performance)
- F3970/F3970WH Ultra High Solids Primers
- F3975 Fast Dry Surfacer
- F3980 High Solids Primer
- F3983 High Solids Fast Dry Primer
- F3985/86/87 Pigmented Sealers
- F3993/95/97 Conventional Epoxy Primers
- F4921 2.1 VOC Epoxy Primer
- F4932 2.1 VOC Fast Dry Urethane Surfacer
- F4935/36/37 High Solids Epoxy Primers
- F4940 3.5 VOC Non-Chrome Etch Primer (Must be sealed for optimum performance)
- F4943 2.1 VOC Fast Dry Urethane Sealer
- F4945 5.5 VOC Wash Primer (Must be sealed for optimum performance)

When sanding prior to the application of FDGH topcoat, use 220 – 320 grit wet or dry

*The following reducers contain volatile HAP (VoHAP). They may be used in areas where VoHAP content is not severely restricted.

F3311 Reducer - Fast	F3341 Reducer – Hot
F3321 Reducer – Medium	F3351 Retarder
F3331 Reducer – Slow	



FDGH

Application Data

Selection of Substrate Cleaner:



ONECHOICE® Commercial CFX Cleaners

Code	Product	Purpose
CFX435LV	Low VOC Cleaner	Compliant cleaner suitable for removing dirt, grease or other contaminants before or during the painting process.
CFX436	Wax & Grease Remover	Suitable for removing dirt, grease or other contaminants before or during the painting process.
CFX437	Heavy Duty Wax & Grease Remover	Used to remove heavy milling oils and grease from bare substrates prior to the painting process.

Mixing Ratio:



Full Gloss				
		F3400/F3405/F3410		
FDGH	: F3259	:	per RTS gal.	:
2	:	1	:	6 oz
				F33xx
				10%
		F3400/F3405/F3410		
FDGH	: F3260	:	per RTS gal.	:
3	:	1	:	6 oz
				F33xx
				10%

10% reducer optional in solid color



Low Gloss*				
		F3400/F3405/F3410		
FDGH	: F3260	:	F3385/F3390/F3395	:
6	:	1	:	1
				per RTS gal.
				6 oz.

**Flat, eggshell and semi-gloss formulas contain a special flattening binder (F3118), which is necessary for a low gloss appearance. This mixing ratio should only be used with color formulas containing F3118.*

Pot Life @70°F (21°C) / 50% RH:



4 – 5 hours (Full Gloss)
2 – 3 hours (Low Gloss)

High heat and humidity will shorten pot life.

Spray Viscosity:



#2 ZAHN CUP	#3 ZAHN CUP	4DIN
23 – 35 seconds	10 – 20 seconds	15 – 25 seconds

Spray Gun Set-up:



	HVLP	COMPLIANT
Fluid Tip:	1.3 – 1.5 mm	1.3 – 1.5 mm
Air Pressure:	10 PSI at the cap	45 – 65 PSI
Pressure Pot Set-up:	1.0 – 1.4 mm with 8 – 12 fluid ounces per minute	1.0 – 1.4 mm with 8 – 12 fluid ounces per minute

Number of Coats:



1 cross coat or 2 coats

Allow 15 – 20 minutes flash between coats if, applying 2 coats

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Application Data (continued)

**Flash Off @70°F (21°C)
before force drying:**



0 – 10 minutes

Dry Times:



Dust-Free: 30-60 minutes (Full Gloss)
70°F (21°C) 15-25 minutes (Low Gloss)



Tape Time: 3 hours
70°F (21°C)
140°F (60°C) 40 minutes



Overcoat / Recoat: 30 minutes to 8 hours
70°F (21°C) (Sanding is required after maximum time)

**Force dry times are for quoted metal temperature. Additional time should be allowed in the force-drying schedule to allow metal to reach recommended temperature.*

Film Build:

	Wet (per coat)	Dry (total)
Minimum	2.8 mils	1.5 mils
Maximum	7.5 mils	4.0 mils

Performance Comments:

Wash and Etch primers must be sealed before applying topcoat for optimum performance.

Physical Characteristics:

Combinations	FDGH: color	FDGH : F3260 : F3400/F3405/			
		FDGH : F3260 : F3400/F3405/F3410	FDGH : F3260 : F3400/ F3405/F3410 : F3385/ F3390/F3395	FDGH : F3260 : F3400/F3405/ F3410 : F3320/F3330/F3340/ F3350/F3360/F3311*/F3321*/ F3331*/F3341*/F3351*	FDGH : F3260 : F3385/ F3390/F3395 : F3400/ F3405/F3410
Volume Ratio	As is	3 : 1 : 6 oz per RTS gal	3 : 1 : 6 oz per RTS gal : 10%	3 : 1 : 6 oz per RTS gal : 10%	6 : 1 : 1 : 6 oz per RTS gal
Applicable Use Category	Single-Stage Ctg	Single-Stage Ctg	Single-Stage Ctg	Single-Stage Ctg	Single-Stage Ctg (Low Gloss)
VOC Actual	277 - 421 (g/L) 2.31 - 3.51 (lbs/gal)	279 - 383 (g/L) 2.33 - 3.19 (lbs/gal)	254 - 348 (g/L) 2.12 - 2.90 (lbs/gal)	294 - 419 (g/L) 2.45 - 3.50 (lbs/gal)	194 - 294 (g/L) 1.62 - 2.45 (lbs/gal)
VOC Regulatory (less water less exempt)	277 - 423 (g/L) 2.31 - 3.53 (lbs/gal)	279 - 383 (g/L) 2.33 - 3.20 (lbs/gal)	279 - 383 (g/L) 2.33 - 3.20 (lbs/gal)	306 - 419 (g/L) 2.55 - 3.50 (lbs/gal)	273 - 419 (g/L) 2.28 - 3.50 (lbs/gal)
Density	1007 - 1609 (g/L) 8.40 - 13.43 (lbs/gal)	1035 - 1456 (g/L) 8.64 - 12.15 (lbs/gal)	1063 - 1445 (g/L) 8.87 - 12.06 (lbs/gal)	1013 - 1401 (g/L) 8.45 - 11.69 (lbs/gal)	1000 - 1650 (g/L) 8.34 - 13.77 (lbs/gal)
Volatiles wt.	18.1 - 41.6 %	19.9 - 37.3 %	26.7 - 44.5 %	24.1 - 42.1 %	29.4 - 72.7 %
Water wt.	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Exempt wt.	0.0 - 41.6 %	0.0 - 37.3 %	8.5 - 44.5 %	0.0 - 42.1 %	16.7 - 72.7 %
Water vol.	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Exempt vol.	0.0 - 48.1 %	0.0 - 43.2 %	9.1 - 48.4 %	0.0 - 48.4 %	23.2 - 78.5 %
Solids vol.	51.9 - 68.8 %	56.8 - 69.0 %	51.6 - 62.7 %	51.6 - 62.7 %	21.5 - 51.4 %
Theoretical coverage in Sq. Ft./US gal. Ready-to-spray (RTS), giving 1 mil. (25 µm) dry film thickness (Assuming 100% Transfer Efficiency)	N/A	911 - 1107	827 - 1005	827 - 1005	345 - 824

*The following reducers contain volatile HAP (VoHAP). They may be used in areas where VoHAP content is not severely restricted.

F3311 Reducer - Fast
F3321 Reducer - Medium
F3331 Reducer - Slow

F3341 Reducer - Hot
F3351 Retarder

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Application Data (continued)

Physical Characteristics:

RTS Combinations	FDGH : F3259 : F3400/F3405/F3410	FDGH : F3259 : F3400/F3405/F3410 : F3385/F3390/F3395	FDGH : F3259 : F3400/F3405/F3410 : F3320/F3330/F3340/F3350/F3360/F3311* /F3321*/F3331*/F3341*/F3351*
Volume Ratio	2 : 1 : 6 oz per RTS gal	2 : 1 : 6 oz per RTS gal : 10%	2 : 1 : 6 oz per RTS gal : 10%
Applicable Use Category	Single-Stage Ctg	Single-Stage Ctg	Single-Stage Ctg
VOC Actual	219 - 312 (g/L) 1.83 - 2.60 (lbs/gal)	199 - 283 (g/L) 1.66 - 2.36 (lbs/gal)	237 - 361 (g/L) 1.98 - 3.01 (lbs/gal)
VOC Regulatory	252 - 360 (g/L) 2.10 - 3.00 (lbs/gal)	252 - 358 (g/L) 2.1 - 2.99 (lbs/gal)	283 - 410 (g/L) 2.36 - 3.42 (lbs/gal)
Density	1077 - 1462 (g/L) 8.99 - 12.20 (lbs/gal)	1111 - 1451 (g/L) 9.27 - 12.11 (lbs/gal)	1061 - 1407 (g/L) 8.85 - 11.74 (lbs/gal)
Volatiles wt.	27.6 - 44.9 %	33.7 - 51.0 %	31.3 - 48.9 %
Water wt.	0 %	0 %	0 %
Exempt wt.	11.9 - 44.9 %	19.3 - 51.0 %	11.3 - 48.9 %
Water vol.	0 %	0 %	0 %
Exempt vol.	13.0 - 48.1 %	20.9 - 52.8 %	11.8 - 52.8 %
Solids vol.	51.9 - 62.8 %	47.2 - 57.0 %	47.2 - 57.0 %
Theoretical coverage in Sq. Ft./US gal. Ready-to-spray (RTS), giving 1 mil. (25 µm) dry film thickness (Assuming 100% Transfer Efficiency)	832 - 1007	757 - 914	757 - 914

Health and Safety:



Safety Data Sheets (SDS) for the PPG products mentioned in this publication are available through www.ppgcommercialcoatings.com (Safety, SDS Search) or your PPG Distributor.

For additional information regarding this product, see the SDS and LABEL information.

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