

DELTA® Fast Dry High Solids Polyurethane

DFHS

Delta® DFHS is a fast-drying, single stage, 3.5 VOC polyurethane finish designed to maximize productivity in today's fleet refinishing operations. Choice of catalyst, available accelerators and potlife extender make DFHS adaptable to shop conditions. DFHS is out of dust in as little as 30 minutes, and quickly cures to a high gloss finish that withstands severe fleet operating conditions. DFHS is available in a wide range of solid, metallic, OEM and custom colors. DFHS is produced using high strength DMHS universal mixing toners and DMHS598 converter.

Features	Advantages	Benefits
<ul style="list-style-type: none"> • Fast air dry • Excellent gloss and leveling • Excellent film properties 	<ul style="list-style-type: none"> • Speeds assembly and delivery • Painter friendly • Withstands severe environments 	<ul style="list-style-type: none"> • Better shop productivity • Outstanding final appearance • Longer repaint cycles

Compatible Surfaces

Delta® DFHS may be applied over:

- | | |
|--|--|
| • DX1793 Chrome Free Self Etching Primer | • DPU166 High Solids Chromate Primer 2.8 VOC Max |
| • DPHS52 Low VOC Primer | • OEM Enamels |
| • DPU174 High Solids Polyurethane Primer | • Cured Air Dry Finishes |

If sanding prior to the application of DFHS, use 240-600 grit wet or dry

Hardeners	
High Solids Urethane Hardener	DFH535
High Solids Urethane Hardener (Slow)	DFH536
Required Additive Options	
Accelerator	DX39
Extender	DX53
DFHS Super Accelerator	DX49



APPLICATION GUIDE

DFHS

Mixing Ratio:



DFHS : **DFH535/DFH536** + ***DX39**
 4 parts : 1 part + 6 oz./RTS gal.

*May substitute DX53 or DX49. (Note: Substitution will effect pot life, dry times and recoatability. See Dry Time Chart.)

Pot Life:



2 hours at 70°F and 50% RH
 (High heat and humidity will shorten pot life)

Additives:



Accelerator:	No Recommendation
Extender:	No Recommendation
Fisheye:	No Recommendation
Flex:	No Recommendation
Flattening:	No Recommendation

Spraygun set-up:



Fluid Tip:
 1.0 - 1.4 mm for Pressure Feed/HVLP
 1.3 - 1.7 mm for Conventional Feed/HVLP

Air Pressure:
 HVLP at air cap 10 PSI
 Conventional at spray gun 45 - 60 PSI

Minimum Number of coats:



2 coats or until hiding is achieved

Total film build per coat:

	<u>Wet</u>	<u>Dry</u>
Minimum	1.5 mils	.8 mils
Maximum	2.0 mils	1.1 mils

Flash Time at 70°F:



Between coats	5-10 minutes	
Before force drying	0 minutes	DFH535
	10 minutes	DFH536

Drying times: (with DFH535)**Air Dry @ 70°F**

w/ DX39	w/DX53	w/ DX49
Dust 30 min.	Dust 30 min.	Dust 30 min.
Tack 90 min.	Tack 90 min.	Tack 1 1/4 hours
Tape 12 hours	Tape 16 hours	Tape 5 hours

Potlife:

2 hours 3 hours 1 hour

Force Dry w/ DX53 Only**

Flash 5 min.
30 min. @ 120°F
15 min. @ 180°F

Drying times: (with DFH536)**Air Dry @ 70°F**

w/ DX39	w/DX53	w/ DX49
Dust 40 min.	Dust 45 min.	Dust 30 min.
Tack 1 hour	Tack 90 min.	Tack 1 hour
Tape 4 hours	Tape 5 hours	Tape 2 hours

Potlife:

2 hours 3 hours 1 hour

Force Dry w/ DX53 Only**

Flash 10 min.
30 min. @ 120°F
15 min. @ 180°F

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

Recoat time:

5 - 10 minutes minimum dry and up to 24 hours maximum at 70°F before sanding is required.

Repair time:

8 hours @ 70°F Air Dry with DFH535
5 hours @ 70°F Air Dry with DFH536
30 minutes after force dried/cool down period

Polish:

24 hours @ 70°F

Optional Clearcoating:

Minimum dry 2 hrs. @ 70°F up to 24 hours. After 24 hours, sanding is required.

Physical Characteristics:

	DFHS color	
Gloss (20 degree)	87.8%	
Gloss Retention (1000 hrs. QUV):	68.7	
Pencil Hardness *	F	
*Film properties, including pencil hardness are given where ultimate air cure is reached, usually 7 days.		
RTS Combinations:	DFHS color	DFHS : DFH53X : DX39, DX49 or DX53
Volume Ratio:	As is	4 : 1 : 6 oz per RTS gal
Applicable Use Category	Single-Stage Ctg	Primer Sealer
VOC Actual (g/L)	347 – 418	359 – 412
VOC Actual (lbs/gal)	2.90 – 3.49	3.00 – 3.44
VOC Regulatory (less water less exempt) (g/L)	347 – 418	359 – 413
VOC Regulatory (less water less exempt) (lbs/gal)	2.90 – 3.49	3.00 – 3.45
Density (g/L)	979 – 1242	993 – 1196
Density (lbs/gal)	8.17 – 10.37	8.29 – 9.98
Volatiles wt. %	32.3 – 42.6	33.6 – 41.2
Water wt. %	0.0	0.0
Exempt wt. %	0.0 – 0.4	0 – 0.3
Water vol. %	0.0	0.0
Exempt vol. %	0.0 – 0.4	0.0 – 0.3
Solids vol. %	N/A	51.9 – 58.6
Sq. Ft. coverage (RTS U.S. gallon. (1 mil at 100% transfer efficiency)	N/A	832 – 940

See Material Safety Data Sheet and Labels for additional safety information and handling instructions

Emergency Medical or Spill Control Information (412) 434-4515; In Canada (514) 645-1320

Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the general public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to PPG Industries. Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results, or fitness for any intended use, nor does PPG Industries warrant freedom from patent infringement in the use of any formula or process set forth herein.

PPG Industries

Commercial Coatings

We're Everywhere You Look

PPG Industries
19699 Progress Drive
Strongsville, OH 44149
1-800-647-6050

PPG Canada Inc.
2301 Royal Windsor Drive, Unit #6
Mississauga, Ontario L5J 1K5
1-888-310-4762