



DELTA® Fast Dry High Solids Polyurethane

DFHS

DELTA® DFHS finish is a fast-drying, single stage, 3.5 VOC polyurethane 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

- Fast air dry
- Excellent gloss and leveling
- Excellent film properties

Advantages

- Speeds assembly and delivery
- Painter friendly
- Withstands severe environments

Benefits

- Better shop productivity
- Outstanding final appearance
- Longer repaint cycles

Compatible Surfaces

Delta DFHS may be applied over:

- DX1793 Chrome Free Self-Etching Primer
- DPHS52 Low VOC Primer
- DPU174 High Solids Polyurethane Primer
- OEM Enamels
- Cured Air Dry Finishes

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

Hardeners

High Solids Urethane Hardener	DFH535
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Required Additive Options

Accelerator	DX39
Extender	DX53
Super Accelerator	CFX849



APPLICATION GUIDE

DFHS

Mixing Ratio:



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

*May substitute DX53 or CFX849. (Note: Substitution will affect pot life, dry times and recoatability; see Dry Time Chart)

Pot Life:



2 hours @ 70°F 21°C 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

Spray Gun 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 21°C:



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

Drying Times:

Air Dry @ 70°F 21°C



	<u>w/ DX39</u>	<u>w/ DX53</u>	<u>w/ CFX849</u>
Dust 30 min.	30 min.	30 min.	30 min.
Tack 90 min.	90 min.	90 min.	1¼ hr.
Tape 12 hrs.	16 hrs.	16 hrs.	5 hrs.

Pot Life:



2 hours	3 hours	1 hour
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Force Dry w/ DX53 Only**

Flash 5 min.
30 min. @ 120°F
15 min. @ 180°F
2 hours @ 70°F 21°C and 50% RH
(High heat and humidity will shorten pot life)

** 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.

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Recoat time: 5 - 10 minutes minimum dry and up to 24 hours maximum at 70°F (21°C) before sanding is required.

Repair time: 8 hours @ 70°F (21°C) Air Dry with DFH535
30 minutes after force dried/cool down period.

Polish: 24 hours @ 70°F (21°C)

Optional Clearcoating: Minimum 2 hours @ 70°F (21°C) 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 : DFH535 : DX39, CFX849 or DX53
Volume Ratio:	As is	4 : 1 : 6 oz per RTS gal
Applicable Use Category	Single-Stage Coating	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 - 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

Health and Safety

Please refer to Material Safety Data Sheet (MSDS) for full health safety details and storage regulations.

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