DELTA® Fast Dry
High Solids Polyurethane

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.

<table>
<thead>
<tr>
<th>Features</th>
<th>Advantages</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fast air dry</td>
<td>• Speeds assembly</td>
<td>• Better shop productivity</td>
</tr>
<tr>
<td>• Excellent gloss and</td>
<td>and delivery</td>
<td>• Outstanding final</td>
</tr>
<tr>
<td>leveling</td>
<td>• Painter friendly</td>
<td>appearance</td>
</tr>
<tr>
<td>• Excellent film properties</td>
<td>• Withstands severe</td>
<td>• Longer repaint cycles</td>
</tr>
<tr>
<td></td>
<td>environments</td>
<td></td>
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</table>

Compatible Surfaces
Delta® DFHS may be applied over:
- DX1793 Chrome Free Self Etching Primer
- DPHS52 Low VOC Primer
- DPU174 High Solids Polyurethane Primer
- DPU166 High Solids Chromate Primer 2.8 VOC Max
- OEM Enamels
- Cured Air Dry Finishes

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

Hardeners
- High Solids Urethane Hardener DFHS35
- High Solids Urethane Hardener (Slow) DFHS36

Required Additive Options
- Accelerator DX39
- Extender DX53
- DFHS Super Accelerator DX49

PPG Industries, Inc., 19699 Progress Dr., Strongsville, OH 44149
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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 recoatibility. 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:

<table>
<thead>
<tr>
<th></th>
<th>Wet</th>
<th>Dry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>1.5 mils</td>
<td>.8 mils</td>
</tr>
<tr>
<td>Maximum</td>
<td>2.0 mils</td>
<td>1.1 mils</td>
</tr>
</tbody>
</table>

Flash Time at 70°F:

Between coats 5-10 minutes
Before force drying
DFH535 0 minutes
DFH536 10 minutes
### Drying times: *(with DFH535)*

<table>
<thead>
<tr>
<th></th>
<th>Air Dry @ 70°F</th>
<th>w/DX53</th>
<th>w/ DX49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust</td>
<td>30 min.</td>
<td>30 min.</td>
<td>30 min.</td>
</tr>
<tr>
<td>Tack</td>
<td>90 min.</td>
<td>90 min.</td>
<td>1 ¼ hours</td>
</tr>
<tr>
<td>Tape</td>
<td>12 hours</td>
<td>16 hours</td>
<td>5 hours</td>
</tr>
</tbody>
</table>

**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)*

<table>
<thead>
<tr>
<th></th>
<th>Air Dry @ 70°F</th>
<th>w/DX53</th>
<th>w/ DX49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust</td>
<td>40 min.</td>
<td>45 min.</td>
<td>30 min.</td>
</tr>
<tr>
<td>Tack</td>
<td>1 hour</td>
<td>90 min.</td>
<td>1 hour</td>
</tr>
<tr>
<td>Tape</td>
<td>4 hours</td>
<td>5 hours</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

**Potlife:**

- 2 hours
- 3 hours
- 1 hour

**Force Dry** w/ DX53 Only

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

**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:

<table>
<thead>
<tr>
<th></th>
<th>DFHS color</th>
<th>DFHS : DFH53X :</th>
<th>DX39, DX49 or DX53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloss (20 degree)</td>
<td>87.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gloss Retention (1000 hrs. UQUV):</td>
<td>68.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pencil Hardness *</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Film properties, including pencil hardness are given where ultimate air cure is reached, usually 7 days.</td>
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<td></td>
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</tbody>
</table>

RTS Combinations:  
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  
Volatile 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

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