

## High Solids Polyurethane Primer

# DPU174

DPU174 High Solids Polyurethane Primer is a 2.8 VOC chrome-free polyurethane primer which exhibits excellent adhesion and corrosion resistance when applied over properly prepared steel, galvanized steel, fiberglass and aluminum substrates. DPU174 may be topcoated in as little as 30 minutes, making it an excellent choice for production-oriented fleet refinishers. The primer can be thinned with DRS series reducers, resulting in a 3.5 VOC primer sealer. DPU174 is primarily designed for use with DELTA® High Solids Polyurethane topcoats.

Features	Advantages	Benefits
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- |  |                            |                                  |
|--|----------------------------|----------------------------------|
| • Adhesion to a wide variety of substrates | • Versatility              | • Less product inventory         |
| • Fast dry to topcoat                      | • Faster turn around       | • Productivity improvement       |
| • Easy to apply                            | • Better flow and leveling | • Customer satisfaction          |
| • Excellent corrosion resistance           | • Protects substrate       | • Longer repaint cycle/unit life |

### Compatible Surfaces

DPU174 may be applied over:

- Properly cleaned and sanded: \*steel, \*aluminum, fiberglass, galvaneal and galvanized steel
- DPHS52 Low VOC Primer
- DX1793 Chrome Free Self Etching Primer
- DPU166 High Solids Chromate Primer 2.8 VOC Max
- OEM Enamels
- Cured Air Dry Finishes

If sanding bare metal areas prior to the application of DPU174, use 180-240 grit wet or dry. Sand old finishes with 280-400 grit wet or dry.

\* Prime aluminum and carbon steel substrates immediately after cleaning.

Hardener	
High Solids Primer Hardener	DPU175
Required Additive Options	
Accelerator	DX39
Extender	DX53



**Mixing Ratio 2.8 VOC:**



**DPU174 : DPU175 + DX39/DX53**

5 parts : 1 part + 6 oz. per RTS gal.

**Mixing Ratio 3.5 VOC:**



**DPU174 : DPU175 + DX39/DX53 : DRS Reducers\***

5 parts : 1 part + 6 oz. per RTS gal. : 1 part

*\*When adding DRS reducers in the 3.5 VOC blend, for best results, the DRS Solvents must be added last, after the addition of the DX39/DX53*

**Pot life:**



**2.8 VOC:** 1 hour @ 70°F and 50% RH

**3.5 VOC:** 2 hours @ 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

**Spraygun set-up:**



**Fluid Tip**

1.0 - 1.4 mm for Pressure Feed/HVLP

1.3 - 1.5 mm for Conventional Feed/HVLP

**Air Pressure**

HVLP at air cap 10 PSI

Conventional at spray gun 50-60 PSI

*Consult the Fleet Training Manual Spray Equipment Section for gun set-up requirements.*

**Minimum number of coats:**

1-2 coats

**Total film build per coat:**



**2.8 VOC**

Minimum

Maximum

**Wet**

2.5 mils

5.0 mils

**Dry**

1.5 mils

3.0 mils

**3.5 VOC**

Minimum

Maximum

**Wet**

2.9 mils

5.8 mils

**Dry**

1.5 mils

3.0 mils

**Flash Time at 70°F:**



Between coats 10 minutes

Before force drying 10 minutes

**Drying times:**

**With DX 39:**



**Air Dry @ 70°F**

Dust 10 minutes  
Tack 15 minutes  
Tape 2 hours

**Force Dry\*\***

Flash 10 minutes  
20 minutes @ 130°F  
10 minutes @ 160°F

**With DX 53:**

**Air Dry @ 70°F**

Dust 15 minutes  
Tack 20 minutes  
Tape 3 hours

**Force Dry\*\***

Flash 10 minutes  
20 minutes @ 130°F  
10 minutes @ 160°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.

**Dry time to topcoat:**

60 minutes @ 70°F for 2.8 VOC\*  
30 minutes @ 70°F for 3.5 VOC\*

\* After 72 hours DPU174 must be sanded before additional primer or topcoat can be applied.

**TEST PROPERTIES**

Color	Gray
VOC Packaged	2.5 lbs. per U.S. gal.
VOC RTS Applied (5:1+6 oz.) 2.8 VOC	2.8 lbs. per U.S. gal.
VOC RTS Applied (5:1:1+6 oz.) 3.5 VOC	3.5 lbs. per U.S. gal.
Volume Solids (RTS) (5:1+6 oz.) 2.8 VOC	60.4%
Volume Solids (RTS) (5:1:1+6 oz.) 3.5 VOC	51.8%
Square Foot Coverage (RTS US Gallon 100% Transfer Efficiency)	969 sq. ft. 2.8 VOC
Square Foot Coverage (RTS US Gallon 100% Transfer Efficiency)	831 sq. ft. 3.5 VOC
Gloss (20 degree)	31.6%
Gloss Retention (1000 hrs. QUV)	100%
Pencil Hardness*	2B

\* Film properties, including pencil hardness are given where ultimate air cure is reached, usually 7 days.

**Compatible Topcoats:**

- |   |   |
|---|---|
| DPHS52 Low VOC Primer                           | DELTA® (DUHS) Basecoat                                |
| DELTA® (DSS) Medium Solids Polyurethane         | DELTA® (DVHS) Fast Dry 2.8 VOC Polyurethane           |
| DELTA® (DFHS) Fast Dry High Solids Polyurethane | DELTA® (DGHS) Chemical Resistant Polyurethane 3.5 VOC |
| DELTA® (DUHS) High Solids Polyurethane          | DELTA® (DGHS) Chemical Resistant Polyurethane 4.4 VOC |
|   | DELTA® (DHS) 2.8 VOC Polyurethane                     |



## INSTRUCTIONS FOR USE

### How to Mix:



#### Mixing Ratio 2.8 VOC

**DPU174 : DPU175 + DX39/DX53**  
 5 : 1 + 6 oz./RTS gal.

#### Mixing Ratio 3.5 VOC

**DPU174 : DPU175 + DX39/DX53 : DRS Reducer\***  
 5 : 1 + 6 oz./RTS gal. : 1

\*When adding DRS reducers in the 3.5 VOC blend, for best results, the DRS Solvents must be added last, after the addition of the DX39/DX53

**Pot life:** 1 hour at 70°F for 2.8 VOC  
 2 hours at 70°F for 3.5 VOC

### Air Pressure:



**HVLP:** 10 PSI at the air cap

**Conventional:** 50-60 PSI at the gun

**Fluid tip:** 1.0 -1.4 mm for Pressure Feed/HVLP  
 1.3 -1.5 mm for Conventional Feed/HVLP

### Application:



**Apply:** 1-2 coats

### Dry Time:



<b>With DX39:</b>	<b><u>Air Dry @ 70°F</u></b>	<b><u>Force Dry</u></b>
	Dust 10 minutes Tack 15 minutes Tape 2 hours	Flash 10 minutes 20 minutes @ 130°F 10 minutes @ 160°F
<b>With DX53</b>	<b><u>Air Dry @ 70°F</u></b>	<b><u>Force Dry</u></b>
	Dust 15 minutes Tack 20 minutes Tape 3 hours	Flash 10 minutes 20 minutes @ 130°F 10 minutes @ 160°F

**PRODUCTS NEEDED FOR JOB**

For additional information, refer back to the complete FL303

## HEALTH AND SAFETY

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

Emergency Medical or Spill Control Information (304) 843-1300; 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.



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