

DuPont™ 13325S™ Polyurethane Clearcoat

Type

DuPont 13325S™ is a high-productivity polyurethane clearcoat.

Description

DuPont 13325S™ is a clear polyurethane coating designed to deliver excellent appearance and durability for interior cabin surfaces. DuPont 13325S™ delivers exceptional clarity, dry times, sandability, UV-protection, and low overspray.

Recommended Uses

DuPont 13325S™ is recommended for use with DuPont 13225S™ as part of a wood cabinetry finishing system. This system is designed to provide excellent appearance while reducing overall material usage and labor cost in the production of high-build, mirror-finish wood surfaces. Flame retardant is typically added at the level required to pass completed part flammability testing.

General Information for Use

Components

DuPont 13325S™ Polyurethane Clearcoat
DuPont 13125S™ Urethane Activator

See DuPont 13225S™ product data sheet for basecoat information.



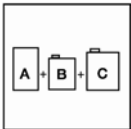
Mix Ratio

Thoroughly mix DuPont 13325S™ prior to activation. Filter activated material prior to spray application.

Two Component System	Parts by Volume
DuPont 13325S™ Polyurethane Clearcoat	4
DuPont 13125S™ Urethane Activator	1

Flame retardant additive is typically added at 4 – 7% by volume. Burn testing of actual part/surface is required to determine appropriate flame retardant amount.

Viscosity will be 15 - 17 seconds in a Zahn #2 cup, without additive.

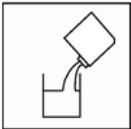
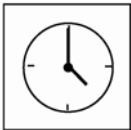


Pot Life and Induction Time

Pot life is 2 hours at 70°F (21°C).
No induction time is required prior to application.

Additives

Flame Retardant Flame retardant additive is typically added at 4 – 7% by volume. Burn testing of actual part/surface is required to determine appropriate flame retardant amount. Flame retardant will increase dry times.



Application



Substrates and Surface Preparation

Surface preparation is critical to final appearance of clearcoat. All substrate should be sanded, using 400 grit or higher sandpaper. For wood surfaces, see preparation recommendations provided in the DuPont 13325S™ product data sheet.



Gun Setup

DuPont 13325S™ can be applied with conventional, HVLP, air-assisted airless, and electrostatic spray equipment using pressure, siphon, or gravity fluid delivery.

Conventional

Pressure Pot
Siphon Feed
Gravity Feed

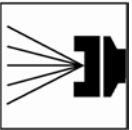
Fluid Tip

1.2mm – 1.6mm (.047" - .063")
1.2mm – 1.6mm (.047" - .063")
1.2mm – 1.6mm (.047" - .063")

HVLP

Pressure Pot
Siphon Feed
Gravity Feed

1.2mm – 1.6mm (.047" - .063")
1.2mm – 1.6mm (.047" - .063")
1.2mm – 1.6mm (.047" - .063")

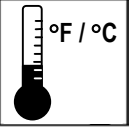


Fluid Delivery

Conventional 10-12 ozs/min
HVLP 10-12 ozs/min

Air Pressure

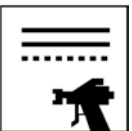
Conventional 50 – 60 psi atomizing air
HVLP 25 – 30 psi atomizing air



Environmental Conditions

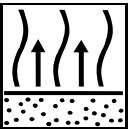
Substrate and ambient temperature must be between 50°F (10°C) and 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%. Heating activated paint above 110°F (43°C) may cause gelation.

For optimum appearance spray DuPont 13325S™ at 75°F (24°C) or warmer.



Application

A 3-coat process is recommended for DuPont 13325S™ application. Spray the first coat medium wet, with a wet film build of no more than 1.0 mil. Allow the coat to flash 3-5 minutes before the next coat. Repeat with a second and then third coat. Once the 3-coat process is completed, allow the coating to dry for 3 hours at 70°F (or 30 minutes at 120°F). Repeat the 3-coat process (additional 3 coats with 3-5 minute flash in between each coat). After the second 3-coat process is completed, allow the coating to dry for at least 8 hours at 70°F. The coating should be sanded smooth, finishing with 1500 grit or higher. A mirror finish can be obtained using a variable speed buffer (1200 – 1800 rpm) with foam pad and finishing polish. Prior to final buffing/polishing, the DuPont 13325S™ application processes may be repeated increase depth of finish.



Dry Times*

Force Dry at 120°F (49°C)

Flash Before Force Dry none required
Dry to Touch 10 minutes (after cool down)
Dry to Sand/Polish 30 minutes

Air Dry at 70°F (21°C)

Flash Between Coats 3 – 5 minutes
Dust Free 10 minutes
Dry to Sand/Polish 3 hours

*Note that addition of flame retardant will increase dry times. Infrared drying is not recommended.



Aviation Finishes



Recoat

DuPont 13325S™ may be recoated with itself after 1 hour if force dried and 2 hours if air dried. If DuPont 13325S™ is being recoated after 24 hours, scuff sand with 1200-1500 grit paper.

Cleanup Solvents

DuPont 13920S™ Low-VOC Cleaner
DuPont 13942S™ Reducer

Physical Properties

VOC	Less Exempts (LE)	As Packaged (AP)
DuPont 13325S™	4.2 lbs/gal	2.9 lbs/gal
Ready-to-Spray DuPont 13325S™ With DuPont 13125S™	4.2 lbs/gal	3.2 lbs/gal

Factory-Packaged Clearcoat

Color	Clear
Closed Cup Flash Point	20°F – 73°F
Shelf Life	3 years (Unopened at 50° – 110°F)

Ready-to-Spray

Theoretical Coverage	490 ft ² /gal at 1 mil dry film thickness
Weight Solids	38%
Volume Solids	31%
Gallon Weight	7.7 lbs/gal

Dry Film

Gloss	≥ 90 measured at 60°
-------	----------------------

Coating Performance

Chemical and Solvent Resistance	Very Good
Humidity Resistance	Excellent
Acid and Alkali Resistance	Very Good
Abrasion Resistance	Very Good
Weatherability	Excellent
Flexibility	Very Good

Safety and Handling

DuPont is committed to helping you develop and maintain a safe working environment. Carefully read the specific warnings and precautions printed on the labels and material safety data sheets (MSDS) of all DuPont products before handling and using. These products are for industrial use by trained professional painters only. Do not permit anyone in the painting area without protective equipment per product MSDS.

Revised 8/2005



Aviation Finishes