

DuPont™ 18320S™ Clear Polyurethane Wood Filler-Sealer

Type

DuPont™ 18320S™ is a high-productivity clear-pigmented polyurethane filler-sealer.

Description

DuPont™ 18320S™ is designed to deliver excellent appearance and durability for interior and exterior cabin surfaces. DuPont™ 18320S™ delivers excellent clarity, dry times, and sandability while filling/sealing substrate for final clearcoat application.

Recommended Uses

DuPont™ 18320S™ is recommended for use with DuPont™ 18321S™ or Imron® MS1™ Polyurethane Clearcoat 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.



General Information for Use

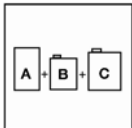
Components

DuPont™ 18320S™ Clear Polyurethane Filler-Sealer

DuPont™ 18120S™ Urethane Activator

DuPont™ 18122S™ Slow Urethane Activator (optional)

See DuPont™ 18321S™ or Imron® MS1™ Polyurethane Clearcoat product data sheet for clearcoat information.



Mix Ratio

Thoroughly mix DuPont™ 18320S™ prior to activation. Filter activated material prior to spray application.

Two Component System

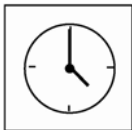
DuPont™ 18320S™ Clear Polyurethane Filler-Sealer

DuPont™ 18120S™ /18122S™ Urethane Activator

Parts by Volume

4

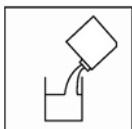
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Pot Life and Induction Time

Pot life is 30 minutes at 70°F (21°C). Pot life can be extended by using Imron®18775S™ Medium Temperature Reducer. Activate as recommended under Mix Ratio, then reduce up to 20% with Imron® 18775S™. This will increase pot life approximately 2 hours at 90 degrees F and 70% RH. Additional coats may be required for acceptable performance.

No induction time is required prior to application



Additives

None Recommended



Guidelines for Use

Substrates and Surface Preparation

Surface preparation is critical to final appearance. All substrate should be sanded, using 240 grit or higher sandpaper. Wood substrates should be thoroughly dried and tacked prior to application.



Gun Setup

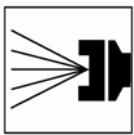
DuPont™ 18320S™ can be applied with conventional, HVLP, air-assisted airless, and electrostatic spray equipment using pressure, siphon, or gravity fluid delivery. Due to high productivity (fast cure), a two-component (plural) system may be necessary for high volume production.

Conventional Fluid Tip

Pressure Pot	1.2mm – 1.6mm (.047" - .063")
Siphon Feed	1.2mm – 1.6mm (.047" - .063")
Gravity Feed	1.2mm – 1.6mm (.047" - .063")

HVLP

Pressure Pot	1.2mm – 1.6mm (.047" - .063")
Siphon Feed	1.2mm – 1.6mm (.047" - .063")
Gravity Feed	1.2mm – 1.6mm (.047" - .063")

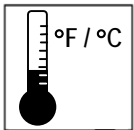


Fluid Delivery

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.

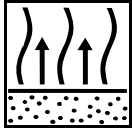


Application

- A 3-coat process is recommended for DuPont™ 18320S™ application. Spray the first coat medium wet, with a wet film build of approximately 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 2 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 with 320grit (or higher) sandpaper and wiped/tacked.
- The surface should appear smooth and free of any texture from underlying wood grain. Additional DuPont™ 18320S™ application processes are recommended if texture remains, with subsequent sanding and cleaning. **Excessive sealer film build may cause a slight cloudy color shift.** Once the wood grain is suitably filled, sanded and cleaned; the substrate is ready to be clearcoated.
- If the filler-sealer is sanded through to bare wood, apply additional DuPont™ 18320S™ and finish as above.

DuPont™ 18320S™ can be applied by brush or roller, allowing 10 to 15 minutes flash between coats. Activate as recommended under Mix Ratio then reduce 10% with the appropriate reducer, depending upon temperature.

DuPont™ 18765S™ Low Temperature Reducer (< 70° F)
 DuPont™ 18775S™ Medium Temperature Reducer (70 - 85° F)
 DuPont™ 18785S™ High Temperature Reducer (>85° F)



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 (after cool down)

Air Dry at 70°F (21°C)

Flash Between Coats	3 – 5 minutes
Dust Free	10 minutes
Dry to Sand	3 hours (8 hours recommended)

Infrared drying is not recommended.



Recoat

Follow recoat recommendations in Application Section above. If DuPont™ 18320S™ is being recoated after 24 hours or longer, scuff sand with 320 grit or lower paper.



Cleanup Solvents

DuPont™ 105™ Thinner or DuPont™ 106™ Thinner

Physical Properties

VOC	<i>Less Exempts (LE)</i>	<i>As Packaged (AP)</i>
DuPont™ 18320S™	4.8 lbs/gal	4.5 lbs/gal
Ready-to-Spray DuPont™ 18320S™ <i>With DuPont™ 18120S™</i>	4.8 lbs/gal	4.5 lbs/gal

Factory-Packaged Filler-Sealer

Color	Cloudy
Closed Cup Flash Point	20°F – 73°F
Shelf Life	2 years (Unopened at 50° – 110°F)

Ready-to-Spray

Theoretical Coverage	470 ft ² /gal at 1 mil dry film thickness
Weight Solids	38%
Volume Solids	29%
Gallon Weight	7.8 lbs/gal

Coating Performance

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

Safety and Handling

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Do not allow material or overspray to enter drains or waterways.

E-R 4687/K-17180
Revised 8/2010

