

Varnish

FLAME CONTROL NO. 166

A Solvent Base Coating



Intumescent Fire Retardant Varnish

Fire Hazard Classification, CLASS "A"

includes prefinished wood paneling), must be washed down with mineral spirits or other suitable solution, to remove all wax, grease, etc. Lightly sand or steel wool all glossy surfaces, test patch small areas, if old coating is not affected, proceed with the application of No. 166. If old coating is affected, it will be necessary to completely remove the coating then treat as "New Surface", and apply Flame Control No. 6, 166 and 167. **NOTE:** On prefinished "V" grooved paneling, it may be necessary to seal the grooves, as most panel manufacturers only stain these areas and the grooves are highly porous.

- Strainer 80 Mesh
- Fluid Hose 1/4" diameter
- Gun G-10N
- Tip018 - .022
- Reduction Up to 7%

* Minimum

APPLICATION

Mix material thoroughly by boxing or stirring. No. 166 can be applied by brush, airless or conventional heavy duty spray equipment. On wood paneling and other large surface areas, spray application is suggested as it will yield a more uniform finish. Should thinning be required, use only Flame Control No. 166 Special Reducer. Apply using a full bodied coat at the recommended coverage rate. **NOTE:** Two coats are required. To conform with surface burning characteristics established for this varnish, dilution of the varnish should be compensated with reduced coverage rates. Do not apply when surface or air temperature is below 50°F (10°C).

APPLICATION EQUIPMENT:

Conventional Spray

- Air Supply 15 CFM, 50 psi fluid 20 psi
- Gun Graco 217-800 to 217-816
- Type External Mix
- Reduction Up to 7%

Airless Spray

- Pump Super Nova
- Fluid Pressure 2000 psi

Information provided herein is based on tests believed to be reliable. In as much as we have no control over the use or application to which others may put this material, we make no guarantee or warranty. This product is sold on the condition that each user of the material make their own evaluation to determine the material's suitability for their own particular use.

FIRE HAZARD CLASSIFICATION

Flame Spread Rating, Class "A" when tested in accordance with ASTM E-84 (NFPA 255), the coating obtained the following UNDERWRITERS' LABORATORIES fire hazard classification

COATING (SYSTEM) DETAILS	CLASSIFICATION OR RATING (When applied to Douglas Fir)	
	Flame Spread	Smoke Developed
SEALER - Type 6 applied in one coat at 400 sq ft/US gal (9.8 m ² /L) BASE COAT - Type 166 applied in two coats at 300 sq ft/US gal per coat (7.4 m ² /L) TOP COAT - None	15	50
SEALER - Type 6 applied in one coat at 400 sq ft/US gal (9.8 m ² /L) BASE COAT - Type 166 applied in two coats at 300 sq ft/US gal per coat (7.4 m ² /L) TOP COAT - Type 167 applied in one coat at 1800 sq ft/US gal (44.2 m ² /L)	15	30-50

PRODUCT
DATA



FLAME CONTROL NO. 167

A Mineral Spirit Base, Alkyd Type

Fire Retardant Varnish Overcoat For No. 166
Fire Hazard Classification, CLASS "A"

PRODUCT DESCRIPTION

A Class "A" fire retardant varnish overcoat. Used as a topcoat for No. 166 intumescent fire retardant varnish. No. 167 is available in three sheens, low, semi or hi-gloss. No. 166 fire retardant varnish must be applied prior to the application of No. 167, to achieve a Class "A" fire rating.

RECOMMENDED USES:

The use of No. 167 as a topcoat over No. 166, greatly improves the durability, and cleansibility of No. 166. We recommend that No. 167 be used to topcoat No. 166 on all surfaces that will be subjected to washing, handling or where a low, semi or hi-gloss finish is desired.

USED BY:

Schools, Colleges, Nursing Homes, Child Care Centers, Hospitals, Penal Institutions, Apartments, Hotels, Factories, Warehouses, Retail Stores, Restaurants, Utilities, Railroad and other Transportation Companies, Oil and Chemical Installations, Military Installations and other facilities where Class "A" fire retardant coatings are required.

PERFORMANCE INFORMATION:

- Class "A" fire rated on combustible surfaces when used over No. 166 intumescent fire retardant varnish. (See fire hazard classification section)
- Complies with federal, state, local building and fire code requirements.
- Dries by solvent evaporation to a tough, durable, clear finish, available in low, semi and hi-gloss.
- Meets all present lead and ecological regulations - Photochemically nonreactive according to Rule 102.
- Greatly improves the durability and cleansibility of No. 166.

CHARACTERISTICS

Finish	Clear, low-gloss; 12-18 units @ 60°
	semi-gloss; 45-55 units @ 60°
	hi-gloss; 85-95 units @ 60°
Spreading Rate	600 to 800 sq. ft./U.S. gal. (14.7 to 19.6 m ² /L)
	2 to 2.7 mils wet, 0.6 to 0.8 mils dry
Coverage @ 1 mil dry	490 sq. ft./U.S. gal.
Volume Solids	51% ± 2
Weight Solids	43% ± 2
Drying Time @ 77°F and 50% RH:	To touch, 4 hours
	To handle, 8 hours
	To recoat, 24 hours
Type of Cure	Solvent Evaporation
Flash Point	105°F (40.6°C) (Pensky-Martens Closed Cup)
Reducer/Cleaner	Mineral Spirits
Shelf Life	24 months (unopened)
Packaging weight/gal.	1 & 5 gal. containers
shipping weight	7.8 ± 0.2 lbs. - 4 gals. - 35 lbs.
	5 gals. - 42 lbs.
Application	Brush, roll, conventional and airless spray

PRECAUTIONS:

The liquid coating contains volatile (combustible) solvents. Due care must be exercised during and after application. Adequate ventilation must be provided during and after application until the coating is dry. Keep away from heat, sparks and open flame. Do not smoke - extinguish all flames, pilot lights and heaters - turn off stoves, electric tools and appliances, and any other source of ignition. Avoid contact with skin and breathing of vapor or spray mist. Close container after use.

DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

SURFACE PREPARATION

After the application of Flame Control No. 166 Class "A" Fire Retardant Intumescent Varnish has been completed, allow the surface to dry a minimum of 48 hours. Remove all dust, dirt, etc. from the surface before applying Flame Control No. 167.

APPLICATION

Flame Control No. 167 Overcoat can be applied by brush, roller or spray. Stir material well before using, then apply a uniform coat at a coverage rate of 600 to 800 sq. ft./U.S. gallon (14.7 to 19.6m²/L). In hard use areas or where excessive wear is expected, a second coat is suggested. Allow at least 24 hours drying time between coats. To conform with surface burning characteristics established for this varnish, dilution of the varnish should be compensated with reduced coverage rates. Do not apply when surface or air temperature is below 50°F (10°C).

APPLICATION EQUIPMENT:

Conventional Spray

Air Supply	11.5 CFM, 50 psi fluid 15 psi
Gun	Graco 217-800 to 217-816
Type	External Mix
Reduction	Up to 7%

Airless Spray

Pump	Super Stinger*
Fluid Pressure	1625 psi
Strainer	100 Mesh
Fluid Hose	1/4" diameter
Gun	G-10N
Tip	.012 to .017
Reduction	Up to 7%

* Minimum