



FLAME CONTROL NO. 10 or 10 VOC

A Solvent Base Coating

Shingle Treatment, Clear, Fire Retardant
Fire Hazard Classification, Class "B"

DESCRIPTION:

Flame Control No. 10 is a Class "B" rated fire retardant penetrating wood treatment designed for EXTERIOR use on previously untreated Cedar Shakes and Shingles. It is very effective in reducing the fire hazards of Cedar and other edge grained woods. No. 10 contains no water soluble salts, therefore, its fire retarding properties are lasting. The liquid penetrates deep into the wood depositing its water insoluble fire retardant polymers. Properly treated wood will char, thereby reducing surface burning characteristics. All exterior coatings are subject to deterioration when exposed to weather. In order to insure maximum continued protection, exposed surfaces should be recoated every three to four years. Exposure to strong sunlight will cause the wood to darken. This is due to the nature of the fire retardant ingredients. This darkening in no way affects or impairs the fire retardant qualities of the treatment.

Flame Control No. 10 VOC is a Low VOC Formulation of our standard No. 10 and produces the same penetrating treatment as our standard No. 10. Only the solvents which evaporate after treatment are different.

RECOMMENDED USES:

Designed primarily for use on new and previously untreated CEDAR SHAKES, SHINGLES, and other edge grained woods. Suitable for EXTERIOR application.

USED BY:

Home Owners, Apartments, Motels, Hotels, Schools, Colleges, Nursing Homes, Child Care Centers, Hospitals, Factories, Warehouses, Retail Stores, Restaurants.

PERFORMANCE INFORMATION:

- Class "B" fire rated (see fire hazard classification section)
- Does not leach on exposure to sun, rain, snow or ice.
- Dries by solvent evaporation.
- Meets all present lead regulations.

CHARACTERISTICS:

Finish Penetrating

Color Clear

Spreading

Rate
No. 10 . 300 sq. ft./gal./coat (7.4 m²/L)
5.3 mils wet, 1.1 mils dry
(2 coats required)

No. 10VOC
394 sq. ft./gal./coat (9.7 m²/L)
4.1 mil wet, 1.1 mils dry
(2 coats required)

No. 10 Volume Solids . . 20.5% ± 0.5

No. 10 Weight Solids . . 30.5% ± 0.5

No. 10VOC Volume Solids
27% ± 0.5

No. 10VOC Weight Solids
39% ± 0.5

Drying Time @ 77°F & 50% RH:

To touch 1-2 hours
To handle 3-4 hours
To recoat 24 hours

Type of Cure . . .Solvent Evaporation

Flash Point 110°F (43.3°C)
(Pensky-Martens Closed Cup)

Reducer/Cleaner

No. 10 Xylene (Xylol)

No. 10 Low VOC Acetone

Shelf Life 2 years (unopened)

Packaging . . 1, 5 & 55 gal. containers
No. 10 weight/gal. 8.3 ± 0.15 lbs.
No. 10VOC weight/gal. 8.7 ± 0.15 lbs.

Shipping weight . . 4 gals - 38 lbs.
5 gals - 46 lbs.
55 gals. - 53.5 lbs.

Application . . Brush, dipping, airless
or conventional 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.**

**Read MSDS before opening
containers.**

**KEEP OUT OF REACH OF
CHILDREN**

APPLICATION:

Apply two coats by brush, spray or by dipping. Dipping is the most effective method of treatment for shakes and shingles, as all surfaces are treated. Allow 24 to 48 hours drying time between coats (See PRECAUTIONS). When applying by dipping, allow sufficient time for penetration of the material. Flame Control No. 10 should be applied WITHOUT thinning or dilution. Apply when surface is dry, do not apply if surface is damp or wet, as moisture will prevent penetration of the coating. NOTE: The surface area of hand split and rough textured materials is GREATER than the apparent square footage of the area, reduce spreading rate to compensate for greater surface area.

APPLICATION EQUIPMENT:

Conventional Spray

Air Supply 15 CFM, 50 psi
fluid 15 psi
Gun . . .Graco 217-800 to 217-816
Type External Mix
Reduction Not Recommended



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Airless Spray

- Titan 440 Impact** (or Equivalent)
 Pump
 Fluid Pressure . . . 1800-2200 psi
 Manifold Filter 60 Mesh
 Gun Filter 60 Mesh
 Fluid Hose 1/4" diameter
 Gun LX-80 II
 Tip010 - .013
 Reduction . . . Not recommended

TEST RESULTS (Small Scale)

Flame Exposure (Seconds)	No. 10 Treated Shingle Time to Self Extinguish (Seconds)
15	1
30	2
60	3
90	6
120	15

CONTROL (Untreated Shingle)

15	4
30Continuous Burning

TEST RESULTS (Full Scale)

FIRE HAZARD CLASSIFICATION

Flame Spread Rating. Class "B" (*). When applied to No. 1 grade. RED CEDAR SHINGLES and tested in accordance with ASTM E-84, the treatment obtained the following fire hazard classification.

SYSTEM DETAILS	CLASSIFICATION OR RATING (WHEN APPLIED TO CEDAR SHINGLES)	
	Flame Spread	Smoke Developed
SEALER – None Type No. 10 applied in two coats at 300 sq. ft./U.S. gal. (7.4 m ² /L) TOP COAT - None	35	690

(*). Class "B" fire retardant rating per NFPA 703, section 2-2.1.3

The same results apply for our Flame Control No. 10 Low VOC since the composition of the active penetrants are identical.

FIRE TEST:

SMALL SCALE TEST METHOD:

A cedar shingle approximately one foot square was divided in half. One section was treated with two coats of Flame Control No. 10, at a coverage rate of 300 sq. ft./gallon, per coat. Panels were allowed to dry 72 hours, before fire testing.

The panels were placed at a 45° angle for an incline fire test. A Fisher high temperature gas burner, having a flame temperature of 1800. was placed two inches from the panel surface, and the time of the flame exposure measured. The flame was removed at 15 and 30 second intervals, and the time in seconds for the panel surface to self extinguish was recorded. See test results at right.

FULL SCALE TEST RESULTS:

Class "B" (*) Fire Retardant Rating.

As we cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used, we accept no responsibility for results obtained by the application of this information or the safety or suitability of our products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. We sell the products without warranty or guarantee, and buyers and users assume all responsibility and liability for loss or damage from the handling and use of our products, whether used alone or in combination with other products.