FIRE-NOT™ 451

FIRE RESISTANT
INTUMESCENT
LATEX PAINT

Thin Film Technology, Inc.

PRODUCT DATA SHEET

FIRE-NOT™ 451 is based on a proprietary blend of synthetic polymer latex and non-hazardous active ingredients. This unique formulation responds to flame and high heat by swelling into a thick, thermal insulating covering which seals the substrate from damage.

Until activation by damaging heat **FIRE-NOT™ 451** looks just like an ordinary latex paint. Once activated however, it swells to almost 50 times its original thickness becoming a fireproof blanket over sheetrock, wood or almost any other construction surface.

The protective blanket seals the substrate from both heat and oxygen thus eliminating two of the three components necessary for combustion. Gaps up to about ¼" in the **FIRE-NOT™ 451** coating are quickly sealed as the coating swells; smoke generation during this process is minimal.

RECOMMENDED USES

SAFE, DECORATIVE FIRE PROTECTION: Use as directed on interior surfaces such as sheetrock, plywood, paneling to create fireproof surfaces with fire ratings in excess of 2 hours.

FUNCTIONAL FIRE PROTECTION: use to line electric enclosures, storage sheds and cargo areas where internal fire must be contained to prevent spreading.

TECHNICAL INFORMATION

VEHICLE TYPE	Synthetic latex
PIGMENTATION	Color and proprietary ingredients
COLORS	Standard white
FINISH	Matte
THINNER	Not Required
CLEANER	Water
MIXING RATIO	One component material – ready to use
FLASH POINT	Over 200°F (Closed Cup)
SOLIDS BY VOLUME	43.7% (theoretical)
SOLIDS BY WEIGHT	56.2%
WET FILM THICKNESS	8 mils (203 microns) per coat
DRY FILM THICKNESS	7 mils (178 microns) per coat, 14 mils total reqd.
SPREADING RATE/GAL	200 sq.ft./gal per coat – 2 coats required
DRY TIME, (Handling)	14 hrs light, 24 hours heavy @ 77°F
APPLICATION METHOD	Brush, Roller, Spray (recommended)
SHELF LIFE	24 Months minimum
STORAGE CONDITIONS	Normal, avoid freezing
SHIPPING:	Non-Hazmat, Not Regulated

APPLICATION NOTES

SURFACE PREPARATION: No special surface preparation beyond normal good practice for interior latex paints is required. Residues of greasy or oily materials will impair adhesion and may impair fire-resisting qualities if present in sufficient quantity.

MIXING: **FIRE-NOT™ 451** is supplied in five or one gallon containers at ready-to-use consistency. Although the product has excellent resistance to separation and settling in storage it is recommended to stir thoroughly before using.

CURING: **FIRE-NOT™ 451** dries like ordinary latex paints. Allow 5 days for full curing and complete development of its physical properties.

OVERCOATING: the second coat of **FIRE-NOT™ 451** may be applied as soon as the first is dry to touch, typically in 1 – 2 hours depending on temperature and ventilation. A topcoat of any desired high quality acrylic or alkyd material may be applied with impairing its intumescent qualities.

APPLICATION: Use any good quality brushes or rollers taking care to apply heavy film thicknesses. If necessary apply an additional coat in order to build the dry film thickness to 14 mils minimum.

Spray application is preferred, any airless spray unit delivering fluid at a minimum pressure of 1,200 psi (82 bar) through a 21 thou" (0.021") tip will be adequate and will yield a smooth, professional application.

ADDITIONAL PHYSICAL DATA:

SPECIFIC GRAVITY …… 1.29

pH RANGE ……. 8.0 - 8.5

WHMIS Class …….. Not Controlled

VOC (LESS WATER) …… 24.4 Grams/Liter

WE URGE YOU TO READ THE MATERIAL SAFETY DATA SHEET (MSDS) BEFORE USING PRODUCT AND TO CALL THIN FILM TECHNOLOGY, INC. AS NECESSARY FOR ADVICE OR INFORMATION BEFORE ANY ACTUAL OR CONTEMPLATED APPLICATION.

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