

# Viper



## VIPER FIRE RETARDENT PAINTS

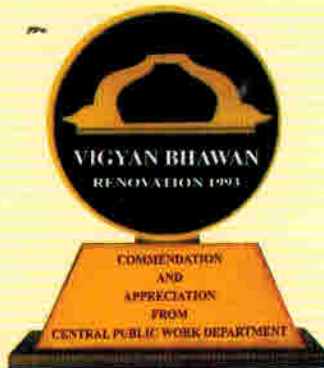
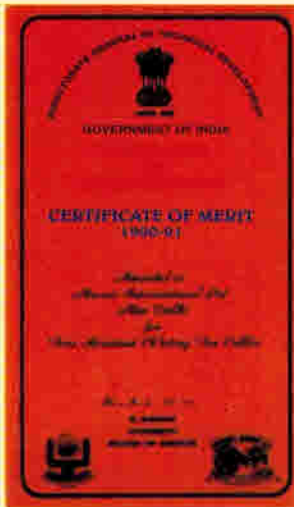
" IT JUST WOODN'T BURN "

## THE COMPANY

Navair International Ltd. are the acknowledged pioneers in the field of passive Fire Protections Systems and have executed large number of projects throughout the country in several Thermal Power Stations, Nuclear Power Plants, Refineries etc.

NAVAIR INTERNATIONAL LIMITED manufactures and supply to the highest British, American & Indian Standards wide range of Fire Resistant Coatings for fire protection to structural Steel, Flame proof decorative paints for Wood, FR clear coating for Flame proofing of, furnishing fabrics and Tapestry etc. Flame proof Hessian for A.C. Ducts, Flame proof Tarpaulines, Tents & Canvas etc., beside a unique total fire protection system for Cables comprising of CABLE FIRE BARRIER for 4 hours Resistance and a special mastic paint for Cables which makes highly combustible PVC Cables equivalent to Fire Survival Cables in terms of IEC:331.

The company also manufactures decorative wooden **FIRE DOORS of 30 mts. 1 hour & 2 hour** Insulated and Uninsulated **STEEL FIRE DOORS OF 1, 2, 3 hours rating**, in addition to fire & Chemical Resistant Coatings, Fire Resistant Anti-bacterial Coatings and many other quality products.



**NAVAIR INTERNATIONAL LTD.** - A National Award Winner company manufactures a wide range of fire Retardant Paints and Coatings, conforming to national and international standards and have been used in every sphere of industry and construction activity for over two decades.

## RANGE OF FR PAINTS AND COATINGS

- FIRERETAR FR 881 FR Paint for **Concealed woodwork**
- FIRERETAR FR881 (CLEAR)- FR **Decorative Clear coating for woodwork**
- FIREGUARD FR 880 **Fire retardant Primer for Exposed Woodwork**
- FIRESHIELD FRS 881-FR **Finishing Decorative Paint for woodwork**
- FIRE & CORROSION RESISTANT PAINT-FR 1102 **FR Decorative Paint for Steelwork such as Electric Panel Boards**

## BRIEF DESCRIPTION OF PRODUCTS

### FLAME PROOF ENAMEL PAINT (For Concealed Wood Work)

#### ➤ FIRERETAR FR-881

Concealed wood work like frame work above false ceiling, unexposed portion of partitioning, paneling etc; is highly prone to fire due to years of combustible accumulated waste & electrical short-circuiting etc. The fire risk is even higher since it cannot be detected early, particularly during closed or unattended periods.

As it is not possible to dismantle this wood work and repaint again, - durability and not the finish becomes the only important consideration.

- Unique single pack ready to use.
  - No primer and thinner required.
  - Apply 2/3 coats by brush.
  - Anti-termite.
  - Maintenance free.
  - **No repeat application**, required.
- USAGE-Apply a unthinned coat of FR 881 on woodwork @3.5 sqm/lit to achieve class I surface spread of flame**

#### APPROVELS

FR-881 is CPWD-DSR approved item (Ref. Page 165 Code no 13.88a-2002)

### FLAME PROOF ENAMEL PAINT (For Exposed Wood Work)

#### ➤ FIREGUARD FR 880 WOOD PRIMER

#### ➤ FIRESHIELD FRS 881 FINISHING PAINT

- Replaces conventional Enamel paint at very nominal extra cost
- Provides super whiteness exquisite and elegant finish to doors, windows, furniture, partitions, meter boxes etc.

- Use two coats of Fireguard FR880 Wood Primer followed by 2/3 coats of Fireshield FRS 881 Finishing paint even on previously painted/polished surfaces.
- For maintenance, apply only one or two coat of Fireshield FRS-881 to redeem finish.
- Fireshield FRS-881 normally available in white and off-white shades.
- Mix good quality stainers to create variety of shades.
- Prime shades on request.

### ➤ **FIRERETAR FR-881 CLEAR** (For Exposed Wood Work)

**Fireretar FR-881 (Clear)** is a single pack, ready to use, intumescent Coating which effectively retards the spread of fire along the surface of wood, reduces flue gases density and flue gas temperature, protects real values and reduces the risk of damages. Provides, smooth and transparent decorative polish finish.

**Usage:** For indoor use on soft & hardwood, plywood, chipboard, fiber insulation boards, hardboards etc. Not suitable for surfaces exposed to mechanical stress.

**Surface preparation:** Surface must be dry, free from dust, oil, wax, greases. Old coatings should be removed.

**Application:** To achieve class-1 surface spread of flame, apply @ 3.5sqm. Per liter in multiple coats with brush/muslin pad using conventional french polish process.

**Top Coat:** Viper Sealant Coating FR-911 (Clear) should be used as top coat for areas which are exposed to high humidity/weathering conditions. Contact us for more details.

**Thinner:** Use, WP-913 upto max. 10%. Use of other thinners may affect compatibility & fire retardant properties.

**Caution:** Use of fire retardant paint on ordinary doors does not make them fire rated doors (FD30, FD60 etc.). For compartmentalization, use only Viper make fire check doors of specified rating, which incorporate special construction, insulation materials and heat activated fire & smoke seal.

**CERTIFICATION:** The product is tested to BS:476 Part 7, 15:12777, ASTM:662-79, ASTM:1360 at CBRI, Roorkee & other reputed laboratories.

**NOTE:** Full fire resistant properties of the viper Products are normally achieved **after seven days**

### ➤ **FIRE & CORROSION RESISTANT PAINT FR-1102** (FOR STEELWORK)

"VIPER" FR-1102 is a rubber based air drying fire retardant paint with excellent acid/alkali resistant properties.

Ordinary synthetic enamel or epoxy paints, being flammable add heavily to the heat of combustion, spread fire rapidly and are serious industrial fire hazard.

#### **USAGE:**

FR-1102 can be used on wide variety of substrate such as steel surface, cement concrete surfaces etc.

It finds application in wide range of industrial activity such as

- Electrical panel boards
- Bleaching/drying, electrolyzing rooms of cotton mills.
- Chemical and fertilizer industries
- Pipe lines running in coastal areas.
- Pulp and paper mills.
- Galvanizing paints/battery rooms.
- Coastal and Marine Environment.

**Note:** Viper make FR1102 paint is a Fire Retardant and Corrosion resistant paint. This paint doesn't provide any fire resistance properties.

For achieving fire resistance on load bearing steel refer to tech. data of STEEL BAR 1101-intumescent coating for steel work.

#### **APPLICATION**

Excellent field results have been obtained on lightly rusted metal surfaces.

- Remove loose/flaky rust with wire, brush etc.
- After 48 hours apply one coat of "VIPER" Primer FR-1101 (R.f.u) followed by two coats of FR-1102 in desired shades.

#### **GOVERNING SPECIFICATIONS**

It meets the requirements of IS: 157, IS: 159 and IS: 160 for its chemical and corrosion resistant properties, and IS: 162 for Flame propagation properties.

Approved for use on electrical panels by Indian Space Research Organization (ISRO).

#### **CHEMICAL RESISTANCE PROPERTIES**

FR-1102 exhibits its excellent resistance to vapors of the chemicals like Ammonium nitrate, NaOH, Ca(OH)<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub> & other acids in various concentrations.

#### **CORROSION RESISTANCE**

It effectively resists corrosive gases like Chlorine, Hydrogen Sulphide, Sulphur Dioxide, Nitric Acid fumes and all organic salts in all concentration in water.

#### **ECONOMY**

Life of FR-1102 is apprx. twice the life of ordinary corrosion resistant synthetic paints and as such, proves to be highly economical in long run.

# TECHNICAL DESCRIPTION

## (Physical Characteristics)

DESCRIPTION	FIRERETAR FR-881	FIREGUARD FR-880 (PRIMER)	FIRESHIELD FRS-881 (FINISHING PAINT)	FIRERETAR FR-881 (CLEAR)	FIRE & CORROSION RESISTANT PAINT FR-1102
Color	Off White	Off White	Radiant white and Off white*	Transparent	white and Off white*
Viscosity (Ford Cup 4) at 30deg.c.	60 +/- 10 Sec.	80 +/-10Sec.	60 +/- 10 Sec.	80 +/- 1 0 Sec	60 +/- 10 Sec.
Wt/Ltr.	1200 +/-50gms.	1200 +/-50gms.	1100 +/-50gms.	1000 +/-50gms.	1100 +/-50gms.
Finish	Matt	Matt	Semi glossy/ Glossy	Smooth & transparent	Smooth & semi glossy
Drying Time	2-3 hours	2-3 hours	3-4 hours	3-4 hours	3-4 hours
Touch Dry Hard Dry	24 hours	12 hours	24 hours	24 hours	24 hours
Thinner Recoating Interval	None Overnight	WP-914 Overnight	WP-914 Overnight	WP 913 Overnight	WP 913 Overnight
Spreading Capacity (IS:101)	8-9 sq.m/lit/coat	9-11. sq.m/lit/coat	9-1 0.sq.m/lit/coat	8-9sq.m/lit/coat.	8-9sq.m/lit/coat
Wet Opacity (IS:101)	5-6 sq.m/lit/coat	8-9sq.m/lit/coat	6-7 sq.m/lit/coat	N.A	6-7 sq.m/lit/coat
Flexibility And Adhesion (IS:101)	Confirms	Confirms	Confirms	Confirms	Confirms
Water Resistant Test(IS:101)	Confirms	Confirms	Confirms	Confirms	Confirms
Resistance to lubricating oil(IS:101)	Confirms	Confirms	Confirms	Confirms	Confirms
Flash Point	Above 30°C	Above 30°C	Above 30°C	Above 28°C	Above 30°C
Packing	4 Lit & 20 Lit	4 Lit & 20 Lit	4 Lit & 20 Lit	4 Lit & 20 Lit	4 Lit & 20 Lit
Shelf Life	One year	One year	One year	One year	One year

\* Shades on request

\* Tech. specification subject to change / revision

### LIABILITY

Whereas the products are manufactured to exacting standards, the nature of the substrate and the application procedure is beyond our control. Whilst please to offer advice, we cannot guarantee. The finished results or accept liability for it. All information provided in good faith but without warranty express and implied.

The information contained in this literature does not necessarily refer to the particular requirement of the customer, when further advice should be obtained.

**This supersedes all previous publications.** Specifications subject to change without notice.



59/17, 2ND FLOOR, KALKAJI EXTENSION,  
GURU RAVI DASS MARG, NEW DELHI- 110019  
TEL.: 011-4686500, 41486271, 41486272, 41486273  
FAX L 011-41486275 E-mail: navair@vsnl.com  
WEBSITE : www.navairindia.com

**LEADERS IN PASSIVE FIRE PROTECTION**