

Firex™ Intumescent Fire Retardant Coatings



Firex™ intumescent fire retardant coatings have provided fire and thermal protection for personnel and property for over 30 years.

Complying with stringent military and defense fire standards, Firex™ products have a proven track record and are optimized to provide the highest level of performance in rapid temperature rise fires, retaining strength, with excellent adhesion even in the harshest of environments such as cellulosic and hydrocarbon fires.



Before Char Formation After Char Formation

Function of Flame Retardants

Firex™ coatings are designed to interrupt or hinder the combustion processes of a fire allowing more time to escape.

Our coatings delay or slow:

- time to ignition (flash over)
- smoke development
- spread of flames

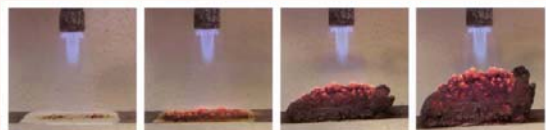
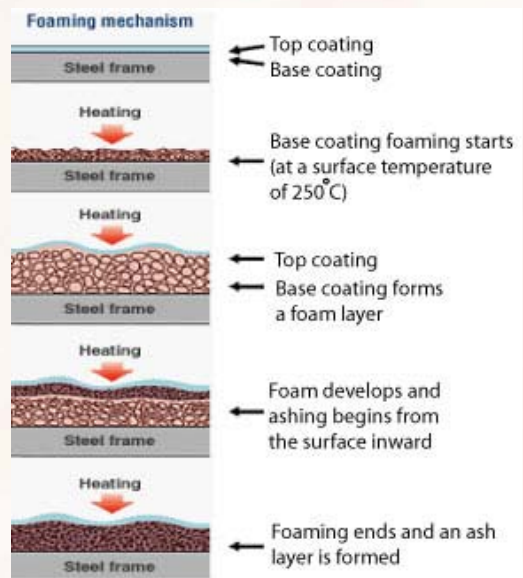
- release of toxic gases
- release of corrosive chemicals
- release of heat

Firex™ fire retardants interfere with the combustion at various stages of the process including during heating, decomposition, ignition or flame spread.

How Does Firex™ Work?

Firex™ coatings are designed to

- promote the formation of char layer
- create a glassy protective layer
- terminate free radical processes in the gaseous phase
- cool the coating down through heat absorbing reactions - e.g. by releasing cooling gases



Minteq Pyrogenics Group

Coating Thickness

Firex™ coatings coating thickness varies based on the substrate and the desired protection time.

For example, to adequately protect structural steel the coating thickness depends on the size of the steel member, its orientation, and the desired protection time.

For most fire protection requirement an hour protection rating is achieved with about 13 to 19 mm thickness. Each coat is generally about 1.5 mm and build up over time.

Product Offerings:

RX -2390

- Two part epoxy resin
- Forms cooling gases above 177° C
- Insulating char protects to > 2760° C
- Surface – orange peel like

RX -2373

- Two part epoxy resin
- Forms cooling gases above 177° C
- Insulating char protects to > 2760° C
- Surface – smooth

RX -2376

- Two part polyurethane
- Forms cooling liquid film above 121° C
- Maintains substrate temperature for the life of the coating



For Details or Samples Call, FAX or Email

Toll Free: 800-962-8586 FAX: 610-250-3325

Product	RX-2390	RX-2373	RX-2376
Composition	Epoxy	Epoxy	Polyurethane
Type	Intumescent	Intumescent	Ablator
Qualification	MLC-81945A	NAVSEA OD 58075	NAVSORD YW 18040
Primary Protection From	Fire Thermal Pulse Aerodynamic Heating	Fire Thermal Pulse	Thermal Pulse Aerodynamic Heating
Application Methods	Spray Paint/Trowel Panels	Paint/Trowel Panels	Spray
Sizes	Cans/Drums/Panels	Cans/Drums/Panels	Cans/Drums/Panels
Density (g/cc)	1.24	1.24	1.24



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