BROADVIEW TECHNOLOGIES INC.

INTUMAX®EP102* * Patent Pending

Epoxy Flame Retardant and Intumescent Coating

INTUMAX®EP102 is a unique two component epoxy fire retardant - intumescent coating based on our proprietary non-halogenated phosphate technology. All of our phosphates are manufactured in house for our exclusive use.

When exposed to heat and/or fire, INTUMAX®EP102 forms a continuous char foam that protects products from both heat and flame. The active ingredients in INTUMAX® products are not water soluble and will not leach out over time.

INTUMAX®EP102 is recommended for use as a base resin for specialty coatings. The viscosity is easily reduced by the addition of solvents. Pigments, anti-settling agents and other flame retardants may also be incorporated.

Specifications:

%Solids	100%
Mix Ratio (A:B)	100:25
Viscosity Part A@ 25°C	25,000 cps
Viscosity Part B@ 25°C	6,000 cps
Working life @ 25°C	2 1/2 hours
Tack free set time @ 25°C	12 hours
Full Cure @ 25°C	48 hours

Typical Properties	**5 mil thick coating**
Flammability Rating (UL94)	V-0
Glass Transition Temp	80°C
Hardness Shore D	72
Peel Strength	6.5 lbs/inch
Elongation to break	12%
Char height	over 1.0 inches
Char initiation temp	300°C
Thermal Conductivity of Char	$\leq \frac{1 \times 10^{-4} \text{ cal}}{\text{sec cm}^2 \text{ °c/cm}}$
Air convection through Char	$\leq \frac{.001 \text{ cc } \Delta P \text{ (mmHg)}}{\text{cm}^2 \text{ sec}}$
MSC.41(64)	Pass for marine coating

This char foam rises in 20 - 40 seconds. Once this char layer forms, smoke generation is almost entirely eliminated, the burning ceases, and coated surfaces are thermally insulated.

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