



## **CEASEFIRE™ WATERBORNE FIRE RETARDANT COATING Technical Data Sheet**

**CEASEFIRE™ Waterborne Epoxy** is a two-part intumescent coating. It is engineered to be a protective coating that combines toughness and wear resistance with low flame spread, low heat transfer, and low smoke. In addition, the smoke generated is low in toxicity. The char foam that is formed 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.

**CEASEFIRE™ Waterborne Epoxy** cures within 24 hours at room temperature to a tack-free coating while providing close to 3 hours of working life.

For ease of application or for spraying, **CEASEFIRE™ Waterborne Epoxy** is readily thinned with tap water. It can also be color tinted using a water based paste pigment.

Part A is a paste and Part B is a liquid. To decrease the 25 min at 2000°F applied as a coating at 32 dry mil thickness viscosity add up to 5% water to Part A. At 5 lbs of Part A material, add .25 lbs or 1/4 lb or 4 oz by weight of water to the 5 lbs of material. This is about 5 oz of water to 5 lbs of material. Mix it into the Part A. It will turn the paste into a thick self leveling material. To make Part A thinner, heat Part A to about 85 degrees F. At that temperature, the Part A material will pour out of its container. Add in the Part B and mix it well and the mixture is a standard very thick one coat latex paint. This mixture can now be spread with a brush, 3/16 inch lambs skin roller cover, or a stipple roller cover. By increasing the temperature of the epoxy to anything over 70 degrees F, the pot life of the material is reduced, but at 80 degrees F, the pot life is roughly an hour to apply it. This means getting the hot material out of the container, and onto the substrate, and start spreading it out. Leaving the material inside a container, the pot life can be cut down to 15 minutes of working time.

Inexperienced applicators of epoxy should never work with the material before reading the MSDS sheets, and working with the material on a piece of plywood before starting a project. Mix a small amount of material by weight not volume, and spread it out onto a piece of plywood watch the time from working to spreading the material and watch the material change. If you are looking to meet a certain fire code, you need to make sure you know how thick the material needs to be to meet the requirement. For example, you can get a UL 1709 25 minute flame test with 32 dry mils of product applied to the substrate. Your mixture of Part A and Part B is about 80% solids, if you add 5% water to the mixture, you have 75% solids. So using 75% solids, when you apply 10 wet mils of product to your substrate, you should get 7.5 dry mils. At that rate, you would need to apply four coats at 10 wet mils, and a fifth at 5 wet mils to get 32 dry mils, or 42.6 wet mils equals 32 dry mils. The mixture will sag on the vertical at thickness greater than 12 wet mils.

Clean up is with warm not hot water.



<b>Specification</b>	<b>Value</b>
<b>% Solids Part A</b>	100%
<b>% Solids Part B</b>	73%
<b>Mix Ratio (A:B)</b>	100:25
<b>Viscosity Part A</b>	Paste – highly thixotropic
<b>Viscosity Part B</b>	800-1000 cps
<b>Mixed viscosity @ 25°C</b>	20,000 cps
<b>Color Part A</b>	Light tan to pink
<b>Color Part B</b>	Light yellow
<b>VOCs</b>	None

<b>Other properties:</b>	<b>Value</b>
<b>Flame Spread (E84 equiv. based on known standards)</b>	Class A
<b>Thermal Expansion of Foam</b>	>10 times thickness of coating
<b>UL1709</b>	25 min at 2000°F applied as a coating at 32 dry mil thickness

