



CERAMIC EX1

Product Bulletin

Ceramic EX1 is a water based, ceramic coating which, when applied to a non-flexible surface and dried, forms a hard fire resistant surface. **Ceramic EX1** bonds well to most fiberboard, wood, or wood-based surfaces without degrading or altering the material in either its active or passive state.

APPEARANCE

1. White liquid. Sweet odor.
2. Dries to an odorless, opaque, white, smooth finish.

TYPICAL PROPERTIES

| | |
|----------------|--------------------------------------------|
| Weight/gallon: | 13.1 lbs. |
| Viscosity: | 2,500 + 500 cps (Brookfield, #3 at 12 rpm) |
| Solids: | 65% |
| pH: | 11.2 |

APPLICATIONS

Ceramic EX1 may be applied by spray, dip, roller, or brush. It must be applied in several coats with no more than 4 mils of wet coating per layer. It is important that the coating is dry before a new layer is applied. The total amount of coating will depend on the degree of fire resistance required. A typical application level to achieve good fire resistance over wood would be two coats at about one gallon of **Ceramic EX1** per 100 square feet per coat.

For the coating to be water resistant, it must be heat cured at 248 F to 266 F for two hours. The temperature should not exceed 275 F or it will begin to expand forming a porous, bubbled texture. This is due to the release of a large quantity of water of hydration. If heating the coating to achieve water resistance is not practical, a light coat of FRC-EX5 or **Ceramic EX12** may be applied over the **Ceramic EX1**.

Ceramic EX1 may be pigmented. Before adding pigment, check with PyroTech.

NOTE: While **Ceramic EX1** functions well on many materials, it does not provide fire resistance to every product. The buyer accepts liability for determining whether the product is suitable for the buyer's intended use.

PACKAGING

The product is available in 5-gallon pails or 55-gallon drums. It should not be repackaged without consulting PyroTech.

STORAGE

The recommended storage temperature for **Ceramic EX1** is between 50° F and 100° F. If the product is stored below freezing, it should be brought back slowly to room temperature and stirred.

HANDLING AND USE

Ceramic EX1 is alkaline (pH 11.2) and appropriate precautions should be taken when handling. Wear a protective mask, gloves, and safety goggles to avoid potential nasal, throat, skin, or eye irritation while applying the product.

Before using **Ceramic EX1** it must be stirred well to redisperse.

Ceramic EX1 can only be applied to surfaces which have not been previously painted or sized. Before application, it is best to clean and sand the surface. Clean all equipment immediately following use with warm water and mild detergent.

SAFETY AND FIRST AID

Ceramic EX1 contains no solvents or toxic ingredients. Because the product is alkaline, it is considered corrosive and proper care should be taken in handling the product.

1. Use proper breathing apparatus to protect from misting when product is sprayed.
2. Flush eyes with water for at least 15 minutes if product contacts them.
3. Wash skin thoroughly with warm water if product is in contact. If irritation occurs, seek medical attention.
4. If product is ingested, induce vomiting and seek medical attention.

PRODUCT BENEFITS

Fiberboard, wood, and wood products coated with **Ceramic EX1** produce a smooth, hard, fire resistant surface. With proper curing or the application of a top coat, the coating becomes water resistant and washable. Since the product is completely inorganic it will not burn and, therefore, no toxic or corrosive gases are given off.

The dried coating will sustain heats in excess of 3,000° F.

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