

# McCRORY-500 LINING MATERIAL™

## TYPE

McCrorry-500 is a two-component, 100% solids coating, based on polybenzimidazol-epoxy-phenolic novlac resin. The base resin, Part A, is a solventless, pigmented viscous liquid. The curing agent, Part B, is a solventless unpigmented viscous liquid. The A:B stoichiometric ratio is 4:1 by volume.

The reaction between the liquid resin and liquid curing agent forms into a highly cross-linked, complex molecule resulting in a dense thermoset solid. The coating formulation, based on this unique resin system, results in a protective film exhibiting toughness, chemical resistance, temperature resistance, and low permeation. These excellent properties are attained because of the polymer type, and the high degree of molecular cross-linking. Exceptionally good adhesion is attained due to the unusually good wetting characteristics of the liquid resin/curing agent mix during application prior to full cure.

Full cure can be attained under water, dramatically reducing the waiting time to place a newly lined tank back in service. When necessary, the coating can be applied to wet surfaces and even under water for some applications.

## RECOMMENDED USES AS A LINING

McCrorry-500 is used as a lining for internal corrosion control and product purity protection. Common uses include the interior surfaces of tanks and cooling tower sumps. McCrorry-500 lining performs at temperatures to 160°F (71.1°C) continuous immersion, and 200°F (93.3°C) intermittent immersion. It is odorless and emits no solvent vapors, making it ideal for confined space applications.

- Potable Water
- Fire Water
- Lubricating Oil
- Salt Water
- Alkaline Solutions
- Mild Acid Solutions

## RECOMMENDED USES EXTERNALLY

McCrorry-500 is used to protect external steel surfaces from corrosion and concrete surfaces from spalling and chemical attack. Common external uses include piping and steel supports at cooling towers, air handler condensate pans, chilled water piping, garage structural steel, concrete sumps and concrete slabs.

## APPROVALS

- ◆ McCrorry-500 is approved under U.S. Federal Register Food & Drug regulation, Title 21, 175.300
- ◆ McCrorry-500 is approved for potable water by NSF-61 & AWWA D-102, D-100 & C-210 standards

## APPLICATION PROPERTIES

McCrorry-500 is formulated for hot spray or cold application with roller or brush. When using a roller or brush, the lining is applied to a thickness of 4 to 6 mils per coat. Three coats are applied resulting in a nominal dry film thickness of 12 to 16 mils. Set-up time and cure time are inverse functions of temperature. Application temperature range is 50°F (10°C) minimum to 100°F (37.7°C) maximum. At these extremes, set-up time varies from 6 hours to 1 hour. Full cure time varies from 16 hours to 4 hours. A McCrorry Engineering, Inc. technical representative should be contacted regarding surface preparation for specific applications.