



Study on Preparation and Properties of Water-based Epoxy Resin Expansive Fireproof Coating

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Abstract

In this work, the selection of epoxy resin as film forming material, amine as curing agent of two-component coating system as matrix, three (1-oxygen generation-1-p-2,6,7-three oxygen mixed double loop [2.2.2] octane-4-methylene) phosphate ester (Trimer) as the main body of the expansion of the flame retardant agent and coordinated effect agent composite, expanding fireproof coating was prepared. The influence of thickness of fireproof coating, face base ratio and synergistic agent on fireproof performance of fireproof expansive coating was studied.

Keywords: Waterborne epoxy; Expanded ultra-thin type; Synergy; Fire resistance

Retracted