

4. Conclusions

This paper presented the influence of the water cement ratio and retarder content on the compressive strength of MKPC and its variation law. The BO_3^{3-} formed by hydration caused the compressive strength of MKPC to increase first and then decrease, and excess composite retarder hindered the solidification of MKPC. MKPC can better replace epoxy resin to reinforce concrete structures and significantly improve their interfacial shear strength. Additionally, ammonia was no longer released during construction, thus expanding the application of MKPC in civil engineering.

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