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Tests of Polymer Conservation Agents for Treatment of Spongolite

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The aim of this research was to compare the applicability of different commercial conservation agents for treatment of spongolite, which was commonly used in czech romanesque and gothic architecture. An influence of selected conservation materials on some physical-mechanical properties of this stone was evaluated. Polymers and copolymers on the basis of acrylates, methacrylates and fluoroacrylates, silicates and siloxanes were coated on Ďgolden" spongolite from a quarry Pøední Kopanina. A water capillarity of the coated and uncoated stone samples, their resistance to the salt crystallization and the frost were assessed and changes in surface morphology evaluated. According to the results of these tests, the most appropriate conservation materials on spongolite were chosen.