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STUDYING THE PROPERTIES OF LOCAL POLYESTER FIBER, FORMED FROM POLYETHYLENE TEREPHTHALATE GRANULES

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ABSTRACT

In this work, the properties of local polyester fibers are studied on the basis of physicochemical and physicomechanical analyzes. On the basis of X-ray diffraction analyzes, it was found that the degree of crystallization of local polyester fibers is lower than that of the usual traditionally used lavsan fiber; they hardly differ in physical and mechanical properties. IR spectroscopic and sorption analyzes, as well as characteristic reactions of polyester fibers, showed that local polyester fibers are formed from modified polyethylene terephthalate. It is concluded that, due to the high sorption properties of the fibers, there is a wide possibility of using it in the textile industry.

KEYWORDS: *Polyester, Polyethylene Terephthalate, Sorption, Degree Of Crystallization, IR Spectroscopy, Modification, X-Ray Diffraction Pattern.*

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