

Evaluating the Efficacy of Polyurethane Polymer as a Antimicrobial Agents Over Woods

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Abstract: *It is deal with a research paper, there has been a growing interest in using polymers with antibacterial and antifungal properties; therefore, the present review is focused on the effect of natural compounds on the antibacterial and antifungal properties of polyurethane (PUR). This is very important because materials and objects made with this polymer can be used as antibacterial and antifungal ones in places where hygiene and sterile conditions are particularly required and thus can become another possibility in comparison to commonly used disinfectants, which mostly show high toxicity to the environment and the human health. This topic also presents the possibilities of using natural extracts as antibacterial, antifungal, and antiviral additives, which, in contrast to the currently used antibiotics, have a much wider effect. The different kinds of fungi, but they cannot fight viruses; therefore, compounds of natural origin can find wide use as biocidal substances. Fungi grow in almost any environment, and they reproduce easily in dirt and wet spaces; thus, the development of antifungal polyurethane foams is focused on avoiding fungal infections and inhibiting growth. The ability of micro-organisms to grow on polyurethanes can cause human health problems during the use and storage of polymers, making it necessary to use additives that eliminate bacteria, viruses, and fungi.*

Keywords: polyurethane foams, antibacterial properties, natural additives