EVALUATION OF THE PERFORMANCE OF COMMERCIAL BAKING PAPERS ON THE BIH MARKET

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ABSTRACT

In the paper, the properties of paper intended for baking food were tested, with the aim of evaluating its functionality and quality in practical application. Five commercially available samples from the market of Bosnia and Herzegovina were analyzed. The tests included basic physical-chemical and mechanical parameters as well as functional properties such as absorption power and thermal stability. FTIR spectroscopy was used to identify the type of coating on the paper. The results of these expressions showed significant differences among the tested samples. Samples with higher silicon content showed lower absorption power and better resistance to fat penetration, which was also confirmed by practical baking tests. On the other hand, the mechanical properties were not directly proportional to the coating content, which indicates the influence of the quality of the underlying cellulosic structure. Thermal tests showed the stability of all samples up to 220 °C, while material degradation occurs at higher temperatures. The quality and quantity of the silicone coating play a key role in the functionality of greaseproof paper, especially in terms of the ease of separation of sweet and savory dough and resistance to grease, while the overall mechanical properties also depend on the characteristics of the base paper.

Keywords: baking paper, silicone coating, FTIR spectroscopy, thermal stability, physical-mechanical properties