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# ANTIOXIDANT CONTENT OF FOOD PACKAGES MADE FROM POLYETHYLENE

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Polyethylene is used in many fields due to its uncomplicated modification, especially in food packaging. It exhibits outstanding chemical resistance, high tensile strength, and low density. Unfortunately, to manufacture the desired packages, all kinds of additives must be added. All these additives can migrate to food through the functional barrier and contaminate it, causing human health problems. Though antioxidants as a group of potential migrants, is only one of many groups of additives. Determining antioxidant levels in food packages helps to clarify the migration levels of these compounds, and asses potential health risks.

An objective of this study was to determine levels of Irganox 1010 and Irgafos 168 in food packages made from polyethylene. Composition of selected food packages was identified by attenuated total reflectance Fourier-transform infrared spectrometry, and the analysis of antioxidant levels were carried out using liquid chromatography tandem mass spectrometry.