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Study of the behavior of some vegetable oils during the thermal treatment

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Abstract Large quantities of vegetable oils are consumed in food preparation, cooking and frying. The evaluation of the quality of vegetable oils is based on the measurement of their phisyco-chemical properties such as density, refractive index, viscosity, acid and iodine numbers. The aim of this paper is to evaluate the variation of vegetable oils quality as a result of thermal treatment. The evaluation is based on the measurement of some important phisyco-chemical properties of vegetable oils, before and after thermal treatment: density, viscosity, refractive index, acid number. Commercialy available olive oil, sunflower oil and corn oil were used in the study. Based on this experimental investigation, there can be predicted the changes in the vegetal oils characteristics and also there can be made correlation between their properties.

Keywords: vegetable oil, thermal treatment, physico-chemical properties.

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