Ovidius University Annals of Chemistry Volume 17, Number 1, pp 168-173, 2006

Mathematical modeling of carbon dioxide variation regarding the main parameters which ensure the quality of cola-type soft drinks

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Abstract The increase of soft drink consumption is the main reason for the elaboration of new principles and investigation methods to achieve the optimized production performances. By manipulating the experimental data and using mathematical processing software, the purpose of the present work is to develop mathematical models in accordance with the analyzed situations in order to determine CO_2 variation in bottles relating to other soft drinks' physical-chemical parameters. In this paper, a case study was done regarding the multiple correlation principle application in characterizing the phenomenon and establishing different parameters correlations, for the cola type drinks.

Keywords: cola soft drinks, modeling, correlation coefficients.

ISSN-1223-7221