



Ozawa Kinetic Model Application for Physical Quality Differentiation of Simvastatin Raw Material

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SUMMARY. The kinetic study using thermogravimetry is an efficient method to determine possible decomposition reaction order of drugs in solid state. The aim of this study was to obtain kinetic parameters by Ozawa method in different batches of simvastatin and models of data treatment. Kinetic data showed values of reaction order changing between the batches of simvastatin, in the heating rates and in the models of data treatment. This work allowed to development a new interpretation of kinetic parameters calculated by Ozawa method different from those published in the literature. The reaction order calculated with three batches of simvastatin showed differences between them.

KEY WORDS: Kinetic parameters, Ozawa method, Quality control of drugs, Reaction order, Simvastatin.

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