Solvent Effects on the Decomposition Kinetics of Peracid Esters

R. G. Makitra^a, G. G. Midyana^b, and R. E. Pristanskii^b

^a Institute of Geology and Geochemistry of Fossil Fuels, National Academy of Sciences of Ukraine, Lvov, Ukraine
^b Litvinenko Institute of Physical Organic and Coal Chemistry, National Academy of Sciences of Ukraine,
ul. Nauchnaya 3a, Lvov, 70953 Ukraine
e-mail: midstr@mail.lviv.ua

Received December 25, 2007

Abstract—Electrophilic solvation that operates to weaken the oxygen-oxygen bond is shown to a factor relating to the effect of the media on the decomposition rate of peracid esters. However, an adequate correlation between reaction rate and solvent properties can only be obtained by means of multiparameter linear equations including various characteristics simultaneously.

DOI: 10.1134/S1070363208070232