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Kinetics of phenol biodegradation by Stenotrophomonas maltophilia KB2 strain in batch reactor

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Publication title:	Kinetics of phenol biodegradation by Stenotrophomonas maltophilia KB2 strain in batch reactor
Authors:	Grażyna Bartelmus, Anna Szczotka, Joanna Kaleta, Elżbieta Szczyrba
Journal information:	Prace Naukowe Instytutu Inżynierii Chemicznej Polskiej Akademii Nauk
Tags:	phenol biodegradation, stenotrophomonas mattophilia kb2 strain, kinetics

Abstract: The biodegradation of phenol by Stenotrophomonas maltophilia KB2 strain in a batch reactor was studied. Microbial growth tests in the presence of phenol as the sole carbon and energy source were conducted for different initial concentrations of the degraded compound changed in the range 25-500 g•m⁻³. Haldane's growth kinetic model was found to be the best to fit the experimental data so constants of the kinetic equation as well as yield coefficient were estimated.

Attachments:

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