Accepted Manuscript

Catalytic ozonation of high concentrations of catechol over TiO₂@Fe₃O₄ magnetic core-shell nanocatalyst: Optimization, toxicity and degradation pathway studies

Majid Kermani, Babak Kakavandi, Mahdi Farzadkia, Ali Esrafili, Sevda Fallah Jokandan, Abbas Shahsavani

PII: S0959-6526(18)31326-X

DOI: 10.1016/j.jclepro.2018.04.274

Reference: JCLP 12855

To appear in: Journal of Cleaner Production

Received Date: 14 March 2018

Revised Date: 27 April 2018

Accepted Date: 30 April 2018

Please cite this article as: Kermani M, Kakavandi B, Farzadkia M, Esrafili A, Jokandan SF, Shahsavani A, Catalytic ozonation of high concentrations of catechol over TiO₂@Fe₃O₄ magnetic core-shell nanocatalyst: Optimization, toxicity and degradation pathway studies, *Journal of Cleaner Production* (2018), doi: 10.1016/j.jclepro.2018.04.274.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Title page

Catalytic ozonation of high concentrations of catechol over TiO₂@Fe₃O₄ magnetic core-shell nanocatalyst: optimization, toxicity and degradation pathway studies

Majid Kermani^{1, 2}, Babak Kakavandi^{3,4,*}, Mahdi Farzadkia^{1, 2}, Ali Esrafili^{1, 2}, Sevda Fallah Jokandan^{2, 5}, Abbas Shahsavani^{6, 7}

¹Research Center for Environmental Health Technology, Iran University of Medical Sciences, Tehran, Iran

²Department of Environmental Health Engineering, School of Public Health, Iran University of Medical Sciences, Tehran, Iran

³Research Center for Health, Safety and Environment, Alborz University of Medical Sciences, Karaj, Iran

⁴Department of Environmental Health Engineering, Alborz University of Medical Sciences, Karaj, Iran

⁵Center for Solid Waste Research, Institute for Environmental Research, Tehran University of Medical Sciences, Tehran, Iran

⁶Environmental and Occupational Hazards Control Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

⁷Department of Environmental Health Engineering, School of Public Health, Shahid Beheshti University of Medical Sciences, Tehran, Iran

^{*} Corresponding author at: Department of Environmental Health Engineering, Alborz University of Medical Sciences, Karaj, Iran. Fax: +98 912 854 4766.

E-mail address: kakavandibvch@gmail.com (B. Kakavandi).

Download English Version:

https://daneshyari.com/en/article/8094630

Download Persian Version:

https://daneshyari.com/article/8094630

Daneshyari.com