

Accepted Manuscript

New insights into the effect of base on the dechlorination of DDT in isopropanol-water over Pd/C catalyst under mild conditions

Xuanxuan Ma, Sujing Liu, Ying Liu, Qing Li, Guodong Gu, Chuanhai Xia

PII: S1385-8947(18)31186-0
DOI: <https://doi.org/10.1016/j.cej.2018.06.148>
Reference: CEJ 19359

To appear in: *Chemical Engineering Journal*

Received Date: 16 March 2018
Revised Date: 18 June 2018
Accepted Date: 23 June 2018

Please cite this article as: X. Ma, S. Liu, Y. Liu, Q. Li, G. Gu, C. Xia, New insights into the effect of base on the dechlorination of DDT in isopropanol-water over Pd/C catalyst under mild conditions, *Chemical Engineering Journal* (2018), doi: <https://doi.org/10.1016/j.cej.2018.06.148>



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.

New insights into the effect of base on the dechlorination of DDT in isopropanol-water over Pd/C catalyst under mild conditions

Xuanxuan Ma^a, Sujing Liu^a, Ying Liu^{a,*}, Qing Li^b, Guodong Gu^c, Chuanhai Xia^{a,*}

^a School of Resources and Environmental Engineering, Ludong University, Yantai 264025, China

^b Key Laboratory of Coastal Biology and Bioresource Utilization, Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, Yantai 264003, China

^c Alliance Pharma, Inc. 17 Lee Boulevard Malvern, PA 19355, USA

* Corresponding author:

Dr. Ying Liu, E-mail: liuyingludong@163.com

Prof. Dr. Chuanhai Xia, E-mail: chxia_ldu@163.com

Tel.: +86 535 6016605

Abstract

Catalytic dechlorination of DDT (1,1-bis(4-chlorophenyl)-2,2,2-trichloroethane) over Pd/C catalyst under mild condition was carried out in 70% isopropanol-water (70/30, v/v). The dechlorination pathway of DDT over Pd/C catalyst and the reason for low dechlorination reactivity of DDT were investigated. It was found that there were three dechlorination pathways of DDT in the presence of NaOH: DDT-DDD-CDPB-DPB-DPE,

Download English Version:

<https://daneshyari.com/en/article/6578318>

Download Persian Version:

<https://daneshyari.com/article/6578318>

[Daneshyari.com](https://daneshyari.com)