

Accepted Manuscript

Title: Oxidation pattern of curdlan with TEMPO-mediated system

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PII: S0144-8617(17)31497-2
DOI: <https://doi.org/10.1016/j.carbpol.2017.12.080>
Reference: CARP 13142

To appear in:

Received date: 2-12-2017
Accepted date: 31-12-2017

Please cite this article as: Tang, Rong., Hao, Jie., Zong, Ruijie., Wu, Fangxia., Zeng, Yangyang., & Zhang, Zhenqing., Oxidation pattern of curdlan with TEMPO-mediated system. *Carbohydrate Polymers* <https://doi.org/10.1016/j.carbpol.2017.12.080>

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.

Oxidation pattern of curdlan with TEMPO-mediated system

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Prepared for *Carbohydrate Polymers* as a full paper Dec. 2017

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Highlights

- The oxidation pattern of 1-3 linked curdlan with TEMPO system was investigated.
- The structures of oxidized curdlans were elucidated in details.
- More specific oxidation and less degradation were observed with curdlan.
- The differences of oxidation pattern between 1-4 & 1-3 linked glucans were compared.

Abstract

In this study, the TEMPO-mediated (TEMPO/NaBr/NaClO) oxidation pattern of curdlan was investigated through comprehensively structural analysis of the corresponding oxidized products. During the structural analysis, infrared spectroscopy (IR), nuclear magnetic

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