Accepted Manuscript

Title: On Importance of Impurities, Potential Leachables and Extractables in Algal Nanocellulose for Biomedical Use

Authors: Jun Liu, Stefan Willför, Albert Mihranyan

PII: S0144-8617(17)30502-7

DOI: http://dx.doi.org/doi:10.1016/j.carbpol.2017.05.002

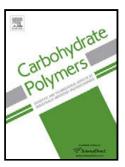
Reference: CARP 12288

To appear in:

Received date: 12-3-2017 Revised date: 28-4-2017 Accepted date: 1-5-2017

Please cite this article as: Liu, Jun., Willför, Stefan., & Mihranyan, Albert., On Importance of Impurities, Potential Leachables and Extractables in Algal Nanocellulose for Biomedical Use. *Carbohydrate Polymers* http://dx.doi.org/10.1016/j.carbpol.2017.05.002

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.



ACCEPTED MANUSCRIPT

On Importance of Impurities, Potential Leachables and Extractables in Algal Nanocellulose for Biomedical Use

Jun Liu, 1,2,* Stefan Willför, Albert Mihranyan 1*

¹ Nanotechnology and Functional Materials, Department of Engineering Sciences, Box 534, Uppsala University, 75121 Uppsala, Sweden.

² Johan Gadolin Process Chemistry Centre, c/o Laboratory of Wood and Paper Chemistry, Åbo Akademi University, Porthansgatan 3-5, FI-20500, Turku/Åbo, Finland.

 $* Corresponding \ author: jun.liu@angstrom.uu.se; albert.mihranyan@angstrom.uu.se\\$

Highlights

- Production of ultra-pure algal nanocellulose for biomedical applications was reported
- Potential microbial contaminants, organic and inorganic extractables were monitored
- Leachable (1,3)- β -D-glucan and endotoxin were controlled below pharmaocopoeia criteria
- Guideline to quantify impurity levels in nanocellulose was proposed

Download English Version:

https://daneshyari.com/en/article/5156680

Download Persian Version:

https://daneshyari.com/article/5156680

<u>Daneshyari.com</u>