Accepted Manuscript

Title: Synthesis and evaluation of functional alginate hydrogels based on click chemistry for drug delivery applications

Authors: Clara García-Astrain, Luc Avérous

PII: S0144-8617(18)30244-3

DOI: https://doi.org/10.1016/j.carbpol.2018.02.086

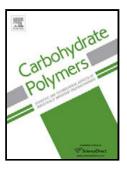
Reference: CARP 13348

To appear in:

Received date: 11-12-2017 Revised date: 1-2-2018 Accepted date: 27-2-2018

Please cite this article as: García-Astrain, Clara., & Avérous, Luc., Synthesis and evaluation of functional alginate hydrogels based on click chemistry for drug delivery applications. *Carbohydrate Polymers* https://doi.org/10.1016/j.carbpol.2018.02.086

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

Synthesis and evaluation of functional alginate hydrogels based on click chemistry for drug delivery applications

Clara García-Astrain, Luc Avérous*

BioTeam/ICPEES-ECPM, UMR CNRS 7515, Université de Strasbourg, Strasbourg Cedex 2, France.

*Corresponding author: email: luc.averous@unistra.fr, Tel: 33 (0)368852784

Highlights

- Alginate hydrogels were cross-linked via Diels-Alder click chemistry
- Alginate was modified with furan groups to different extents
- Hydrogels showed pH-sensitivity and pulsatile swelling
- Hydrogels were tested for the controlled release of vanillin

ABSTRACT

Environment-sensitive alginate-based hydrogels for drug delivery applications are receiving increasing attention. However, most work in this field involves traditional cross-linking strategies which led to hydrogels with poor long-term stability. Herein, a series of chemically

Download English Version:

https://daneshyari.com/en/article/7783006

Download Persian Version:

https://daneshyari.com/article/7783006

<u>Daneshyari.com</u>