

Accepted Manuscript

Title: Effect of molecular weight of starch on the properties of cassava starch microspheres prepared in aqueous two-phase system

Authors: Huiping Xia, Bing-Zheng Li, Qunyu Gao

PII: S0144-8617(17)30950-5

DOI: <http://dx.doi.org/10.1016/j.carbpol.2017.08.074>

Reference: CARP 12681

To appear in:

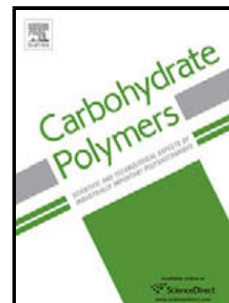
Received date: 5-6-2017

Revised date: 16-8-2017

Accepted date: 17-8-2017

Please cite this article as: Xia, Huiping., Li, Bing-Zheng., & Gao, Qunyu., Effect of molecular weight of starch on the properties of cassava starch microspheres prepared in aqueous two-phase system. *Carbohydrate Polymers* <http://dx.doi.org/10.1016/j.carbpol.2017.08.074>

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.



Effect of molecular weight of starch on the properties of cassava starch microspheres prepared in aqueous two-phase system

Huiping Xia^a, Bing-Zheng Li^b, Qunyu Gao^{a,*}

Postal address:

^a Carbohydrate Laboratory, School of Food Science and Engineering, South China University of Technology, Guangzhou 510640, P.R. China

^b State Key Laboratory of Non-food Biomass and Enzyme Technology/National Engineering Research Center for Non-food Biorefinery/Guangxi Biomass Industrialization Engineering Institute /Guangxi Key Laboratory of Biorefinery, Guangxi Academy of Sciences, Nanning, Guangxi, 530007, China

*Corresponding author. Tel: +86-13660261703; Fax: +86-20-87113848

Email: qygao@scut.edu.cn, shaouping88@163.com, libingzheng@gxas.cn

Highlights

- ✧ Starch microspheres (SMs) were successfully prepared in an aqueous two-phase system
- ✧ SMs prepared with different molecular weights had different morphology and crystallinity
- ✧ The molecular weight of starch had significant effects on the properties of SMs
- ✧ SMs were stable under pH 2.0, but partially hydrolyzed by α -amylase

Download English Version:

<https://daneshyari.com/en/article/5156511>

Download Persian Version:

<https://daneshyari.com/article/5156511>

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