### Accepted Manuscript

Sol-gel 3-glycidoxypropyltriethoxysilane finishing on different fabrics: the role of precursor concentration and catalyst on the textile performances and cytotoxic activity

M.R. Plutino, C. Colleoni, I. Donelli, G. Freddi, E. Guido, O. Maschi, A. Mezzi, G. Rosace

PII: S0021-9797(17)30816-0

DOI: http://dx.doi.org/10.1016/j.jcis.2017.07.048

Reference: YJCIS 22577

To appear in: Journal of Colloid and Interface Science

Received Date: 4 April 2017 Revised Date: 9 July 2017 Accepted Date: 15 July 2017



Please cite this article as: M.R. Plutino, C. Colleoni, I. Donelli, G. Freddi, E. Guido, O. Maschi, A. Mezzi, G. Rosace, Sol-gel 3-glycidoxypropyltriethoxysilane finishing on different fabrics: the role of precursor concentration and catalyst on the textile performances and cytotoxic activity, *Journal of Colloid and Interface Science* (2017), doi: http://dx.doi.org/10.1016/j.jcis.2017.07.048

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**

Sol-gel 3-glycidoxypropyltriethoxysilane finishing on different fabrics: the role of precursor concentration and catalyst on the textile performances and cytotoxic activity

M.R. Plutino<sup>1</sup>, C. Colleoni<sup>2</sup>, I. Donelli<sup>3</sup>, G. Freddi<sup>3</sup>, E. Guido<sup>2</sup>, O. Maschi<sup>4</sup>, A. Mezzi<sup>5</sup>, G. Rosace<sup>2</sup>\*

- <sup>1</sup> Institute for the Study of Nanostructured Materials, ISMN CNR, O.U. Palermo, c/o Department of ChiBioFarAm, University of Messina, Viale F. Stagno d'Alcontres 31, Vill. S. Agata, 98166

  Messina, Italy
- <sup>2</sup> Department of Engineering and Applied Sciences, University of Bergamo, viale Marconi 5, 24044

  Dalmine, Bergamo, Italy
- <sup>3</sup> INNOVHUB, Stazioni Sperimentali per l'Industria, Divisione Stazione Sperimentale per la Seta, Via G. Colombo 83, 20133 Milano, Italy
  - <sup>4</sup> Centro Tessile Cotoniero e Abbigliamento S.p.A., Piazza Sant'Anna 2, 21052 Busto Arsizio, Varese, Italy
- <sup>5</sup> Institute for the Study of Nanostructured Materials, ISMN CNR, Via Salaria km 29.300, 00015

  Monterotondo Scalo, Roma, Italy
- \* Corresponding author. +39 0352052021, E-mail address: giuseppe.rosace@unibg.it
- ° Present address: Silk Biomaterials s.r.l., Via Cavour 2, 22074 Lomazzo (CO), Italy

#### **Abstract**

In this paper, the influence of 3-glycidoxypropyltriethoxysilane (GPTES) based organic-inorganic coatings on the properties of treated textile fabrics was studied. All experimental results were deeply analyzed and thereafter correlated with the employed silica precursor concentration and with

#### Download English Version:

# https://daneshyari.com/en/article/4984577

Download Persian Version:

https://daneshyari.com/article/4984577

<u>Daneshyari.com</u>