

Accepted Manuscript

Title: Effect of vitamin derivatives on gelation rate and gel strength of methylcellulose

Authors: Min Hee Kim, Hanna Park, Ji Youn Shin, Won Ho Park



PII: S0144-8617(18)30574-5
DOI: <https://doi.org/10.1016/j.carbpol.2018.05.042>
Reference: CARP 13624

To appear in:

Received date: 3-3-2018
Revised date: 25-4-2018
Accepted date: 12-5-2018

Please cite this article as: Kim, Min Hee., Park, Hanna., Shin, Ji Youn., & Park, Won Ho., Effect of vitamin derivatives on gelation rate and gel strength of methylcellulose. *Carbohydrate Polymers* (2018), <https://doi.org/10.1016/j.carbpol.2018.05.042>

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Effect of vitamin derivatives on gelation rate and gel strength of methylcellulose

Min Hee Kim, Hanna Park, Ji Youn Shin, Won Ho Park*

Department of Organic Materials Engineering, Chungnam National University, Daejeon,
South Korea

*To whom correspondence should be addressed:

Won Ho Park

Department of Organic Materials Engineering, College of Engineering, Chungnam National
University, Daejeon 305-764, South Korea

Tel: +82-42-821-6613, Fax: +82-42-823-3736

Email: parkwh@cnu.ac.kr

Highlights

- Thermo-sensitive methylcellulose (MC) hydrogel was prepared using three types of vitamin derivatives.
- Gelation rate and gel strength of MC were accelerated by vitamin derivatives with phosphate groups via salting-out effect.
- Thermo-responsive MC hydrogels have a great potential as an injectable hydrogel for drug delivery.

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