

Accepted Manuscript

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PII: S0014-3057(15)00098-1

DOI: <http://dx.doi.org/10.1016/j.eurpolymj.2015.02.023>

Reference: EPJ 6770

To appear in: *European Polymer Journal*

Received Date: 1 December 2014

Revised Date: 20 January 2015

Accepted Date: 16 February 2015

Please cite this article as: Seuyep N., D.H., Jiworrawathanakul, S., Hoven, V.P., Luinstra, G., Theato, P., 1,1-Disubstituted-2-vinylcyclopropanes for the Synthesis of Amphiphilic Polymers, *European Polymer Journal* (2015), doi: <http://dx.doi.org/10.1016/j.eurpolymj.2015.02.023>

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1,1-Disubstituted-2-vinylcyclopropanes for the Synthesis of Amphiphilic Polymers

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Abstract:

Two 1,1-disubstituted-2-vinylcyclopropane monomers, namely 1-aceto-1-pentafluorophenoxy carbonyl-2-vinylcyclopropane and 1-dodecanoxycarbonyl-1-pentafluorophenoxy carbonyl-2-vinylcyclopropane containing activated pentafluorophenyl esters, were polymerized by free radical ring opening polymerization. The obtained reactive polymers were then employed for the synthesis of non-ionic and zwitterionic polymeric surfactants via sequential post-polymerization modifications.

Keywords: 1,1-disubstituted-2-vinylcyclopropanes, amphiphilic polymer, polymeric surfactant, activated pentafluorophenyl ester, post-polymerization modification

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