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Title: Self-association of sodium deoxycholate with EHEC cellulose cooperatively induced by sodium dodecanoate

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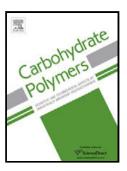
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ACCEPTED MANUSCRIPT

1	Sen-association of soulum deoxycholate with Effect centrose cooperatively induced by
2	sodium dodecanoate
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8	
9	Abstract
10	Some aspects of ethyl (hydroxyethyl) cellulose (EHEC) aqueous behavior in the
11	presence of ionic surfactants are described in the literature; however, most of the studies
12	reported address moderately concentrated solutions. Few studies have been carried out in the
13	dilute regime using mixtures of biosurfactants. The main purpose of this work is to investigate
14	the interaction of EHEC in the dilute regime and to verify the mixture of two surfactants:
15	sodium deoxycholate (NaDC) and sodium dodecanoate (SDoD). The parameters of the
16	surfactant to polymer association processes such as the critical aggregation concentration (cac)
17	and saturation of the polymer by surfactants (psp) were determined from the plots of surface
18	tension and specific conductivity versus surfactant concentration in basic conditions. The cmc
19	of NaDC-SDoD mixtures showed nonideal behavior. However, EHEC added to mixtures of
20	SDoD and NaDC acts as a stabilizer for the mixed aggregate during the association process.
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26 27	Keywords: Ethyl (hydroxyethyl) cellulose, Surface tension, Conductivity, Polymer-surfactant interaction, Anionic surfactants.

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