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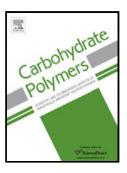
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ACCEPTED MANUSCRIPT

Rheology of epoxidized cellulose pulp gel-like dispersions in castor oil: influence of epoxidation degree and the epoxide chemical structure

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HIGHLIGHTS

- Epoxidized cellulose pulp allows to thicken castor oil medium for bio-lubricant applications
- Epoxidation improves cellulose pulp/castor oil compatibilization
- Epoxidation degree and epoxide chemical structure noticeably impact the rheological properties of cellulose pulp dispersions
- Rheology is consequence of the balance between cellulose pulp/castor oil compatibility and a chemical crosslinkingThe use of aromatic epoxides allows to obtain more cross-linked structures with higher consistency

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