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ACCEPTED MANUSCRIPT

Fast Pyrolysis of Kraft Lignins Fractionated by Ultrafiltration

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Highlights

- Pyrolysis of fractionated lignins by ultrafiltration were carried out by Py-GC/MS.
- Molecular weight of lignin affected the relative content of pyrolytic products.
- High molecular weight lignin favored the generation of G-type compounds at 500
 ^oC.

Abstract

The pyrolysis behavior of different lignin samples fractionated by ultrafiltration membrane technology was investigated by pyrolysis–gas chromatography/mass spectrometry (Py–GC/MS). Results indicated that the predominant products derived from pyrolysis of lignin fractions with different molecular weights changed in the relative content, but not in the compound species. At 500 °C, high molecular weight lignin favored the generation of guaiacol-type compounds (57.33%), and low

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