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**Characterization of thermal, mechanical and hydration  
properties of novel films based on *Saccharomyces cerevisiae*  
biomass**

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**Abstract**

Characterisation of films made of *Saccharomyces cerevisiae* biomass was performed so as to better understand their properties. The treated yeast biomass, named HTH, was prepared by subsequent steps including a first homogenisation, heat treatment and final homogenisation. Glycerol was added as plasticizer and films were evaluated using different techniques to measure mechanical behaviour, thermal properties and water sorption. Temperature of maximum decomposition rate was found near 300 °C, while the gradual disappearance of amide II band ( $1543\text{ cm}^{-1}$ ) occurred from 225 °C, identified by FTIR spectra of residues of

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