

Production of Regenerated Cellulose Film: A Review-

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ABSTRACT

Regenerated cellulose film (RCF) is a regenerated product from dissolved cellulose via physical or chemical interaction. Physical, mechanical, and chemical properties of RCF depend on the types of solvent used to dissolve cellulose, coagulation agent, pouring technique, and drying method. The formation of RCF strongly relies on cellulose solubility and its regeneration. Therefore, the dissolving mechanism in the selected derivative and non-derivative solvents and the coagulant agents such as water, a mixture of water with acetone, sulfuric acid, sulphate-based medium, for example, ammonium sulphate, and a combination between two alcohol and two ester groups will be highlighted in this review. Other than that, the propensity of the resulting RCF based on different solvents and coagulants was also reviewed.

KEYWORDS

Coagulation; derivatizing solvent; dissolving mechanism; non-derivatizing solvent; solubility

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