일반강연 2-1

연속공정에 의한 UF용 폴리이미드 분리막의 제조

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Filtration, one of the most important process in the various industrials, is defined as the separation of two or more compounds from a fluid by passing the mixture refers to the separation of solid, immisible particles from liquid or gaseous mixture. Membrane filtration which is a type of filtration extends it's application further to include the separation, concentration, and filtration.

The main objective of this investigation is the preparation of organic solvents-resistant polyimide membranes by using phase inversion technique and their application as a UF membrane. Specially, the dope solution was prepared from the newly developed method. The newly developed method is that the dope solution was directly prepared from the polyimide solution which was prepared by the modified one-step polymerization.

The effects of the parameters for membrane preparation such as the casting solution composition and the casting conditions were investigated and the performance and chemical stability of membrane are going to be tested.

Monomer $\xrightarrow{one-step\ polymerization}$ *Polyimide dope solution* $\rightarrow$

$\xrightarrow{formulation}$ *Polyimide membrane*