Ethylene/1-octene copolymerization using Ziegler-Natta polyethylene catalyst

Carino Ann Charise, 고영수†
공주대학교
(ysko@kongju.ac.kr†)

The development of Ziegler-Natta catalyst has been the subject of active research for many years. It was discovered that highly active polymerization of ethylene is based on this type of catalyst supported on activated MgCl2. There are different routes for the preparation of MgCl2-supported catalyst. One of which is the chemical route, where active MgCl2 is generated and Ti compound and Lewis base are incorporated. In this study, supported catalyst with active MgCl2 were synthesize through the conversion organomagnesium precursor to MgCl2. The Ziegler-Natta catalyst was used ethylene-octene copolymerization. The effect of this activation process on the catalyst performance, and polymer morphology were investigated.