عنوان مقاله:

Ethylene polymerization with a Synthesized new high-performance Ziegler-Natta catalyst with grinded Mg(OEt)2

محل انتشار:

دوازدهمین سمینار بین المللی علوم و تکنولوژی پلیمر (سال: 1395)

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خلاصه مقاله:

In this study, a high performance Ziegler-Natta type catalyst was synthesized and used for ethylene polymerization. For this purpose titanium tetrachloride used as active component for producing active sites, magnesium ethoxide as support and ethyl aluminum sesquichloride used as a chlorinating agent in catalyst preparation. Characterization of catalyst performed by XRF and UV spectroscopy showed molar ratio of 1:0.35:2.5:0.35 for Mg:Ti:Cl:Al. Polymerization of ethylene was carried out over the catalyst and triethylaluminium. The polymerization data showed that the catalyst has a very good activity. The effects of [Al]/[Ti] molar ratio, temperature and monomer pressure on the activity of the catalyst have been evaluated with Minitab 17

کلمات کلیدی:

Supported catalyst – Magnesium ethoxide – Polymerization of ethylene – Polyethylene