

عنوان مقاله:

Polyethylene/Cloisite 20A Nanocomposites with Improved Mechanical and Thermal Properties for Preparation of Natural Gas Transportation Pipes

محل انتشار:

یازدهمین سمینار بین المللی علوم و تکنولوژی پلیمر (سال: 1393)

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خلاصه مقاله:

Intercalated polyethylene/Cloisite 20A nanocomposites were prepared with different loadings of cloisite20A (0, 1, 3 and 5 wt%) via melt blending. The mechanical and thermal properties of prepared nanocomposites were investigated by the tensile, DSC and MFI tests. The results demonstrated the improved mechanical properties (i.e. tensile strength, Young's modulus and yields stress) and also increased melting temperature and decreased MFI for nanocomposites compared with the pure polyethylene

کلمات کلیدی:

Nanocomposite, Polyethylene, Cloisite 20A, Gas Transportation

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/578907>

