

ABSTRAK

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Judul : Analisis Pengaruh Waktu Pemanasan Awal dan Massa Sampel Terhadap Hasil Uji Indeks Alir Lelehan Polipropilena

Penelitian ini menganalisis pengaruh variasi waktu pemanasan awal (4, 5, dan 6 menit) dan variasi massa sampel (5, 6.5, dan 8 gram) terhadap hasil indeks alir lelehan polipropilena. Variabel ini ditentukan berdasarkan ASTM D1238. Hasil pengujian menunjukkan semakin lama waktu pemanasan awal, maka nilai indeks alir lelehan semakin tinggi. Karena semakin lama polimer terkena panas, semakin turun nilai viskositasnya. Selain itu semakin besar massa sampel menyebabkan nilai indeks alir lelehan semakin turun, karena butuh semakin banyak transfer panas dalam melelehkan massa sampel di barel.

Kata Kunci:

Indeks Alir Lelehan, Pemanasan Awal, Massa Sampel, Polipropilena.

ABSTRACT

Name : Ibnu Sab'at Darojat
Study Program : Metallurgy and Materials
Title : Analysis Of Pre-Heating Time And Sample Mass Effects To The Melt Flow Index Testing Results Of Polypropylene

This research is analyze the influence of pre-heating time variables (4, 5, and 6 minute) and sample mass variables (5, 6.5, dan 8 gram) to the melt flow index testing results of polypropylene. These variables are designed based on ASTM D1238. The testing results show that the higher of pre-heat time, increases the melt flow index value. This is because the longer of polymer is exposed to heat, decreases the viscosity. Beside that, the bigger of sample mass causes decreases the melt flow index value. That is because more needed of heat transfer to melting of sample mass in barrel.

Keywords:

Melt Flow Index, Pre-Heat, Sample Mass, Polypropylene.