

## عنوان مقاله:

Dispersion polymerization of styrene: effect of stabilizer concentration

## محل انتشار:

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

تعداد صفحات اصل مقاله: 3

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## خلاصه مقاله:

Dispersion polymerization consists of monomer, initiator, and steric stabilizer should be dissolved in the polymerization medium such as alcoholic media. Highly mono size of polystyrene microspheres were directly prepared by dispersion polymerization in alcohol media (ethanol) initiated by azobisisobutyro nitrile (AIBN) using poly vinyl pyrrolidone (PVP K-30) as a dispersant agent. That is, dispersion polymerization starts from a homogeneous solution and becomes heterogeneous during the reaction, since the medium is a poor solvent for the polymer being produced. This is similar to precipitation polymerization except that the precipitated polymers are stabilized to form fine particles. Polymerization were carried out in ethanol with different PVP K-30 concentrations of 0.13, 0.16 and 0.2 % Wt and the particle size reduces with increasing stabilizer concentration in the dispersion medium. As a consequence, increasing the number of nuclei results in more PS microspheres with a smaller size with increasing the stabilizer concentration

## کلمات کلیدی:

Dispersion polymerization, Steric Stabilizer, PVP K-30, Microsphere, Particle size

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/578174>

