

Abstract

Spherical carriers for an olefin polymerization catalyst, catalyst components, catalysts, and preparation methods therefor are disclosed. The method for preparing the spherical carriers comprises the following steps: (1) reacting, in the presence of at least one polymeric dispersion stabilizer, a magnesium halide with an organic compound containing active hydrogen to form a complex solution; (2) reacting said complex solution with an alkylene oxide-type compound to directly precipitate solid particles; and (3) recovering the solid particles to obtain spherical carriers. When a catalyst prepared by using the present spherical carrier is used in propylene polymerization, said catalyst exhibits high polymerization activity and high stereo-directing ability.