

Abstract

MAGNESIUM-BASED SOLID AND CATALYST COMPONENT HAVING MULTIMODAL PORE DISTRIBUTION, AND PREPARATION METHODS THEREFOR

The present invention provides a magnesium-based solid and a solid catalyst component for olefin polymerization. By means of determination based on a nitrogen adsorption method, the solid has a multimodal pore distribution and a specific surface area of not less than 50 m²/g, and the pore size distribution of the solid is in a range of 1 nm to 300 nm. There is at least one peak within a pore size range of less than 10 nm, and there is at least another peak within a pore size range of not less than 10 nm. When the catalyst formed using the solid catalyst component is used for propylene polymerization, the catalyst has higher polymerization activity and higher stereotactic orientation capability, and the prepared polymer has a relatively wide molecular weight distribution.

[Figure 1]