

## **Abstract**

Provided are magnesium alkoxide particle and application thereof. The magnesium alkoxide particle contains the reaction product of the following components: 1) a magnesium powder; 2) a mixed alcohol; 3) a halogenating agent; and 4) a titanate compound. When the magnesium alkoxide particle is used for preparing a catalyst for olefin polymerization, the obtained catalyst has high activity; good particle shapes and even distribution, and the polymer bulk density is notably improved.

(Fig. 1)