

Abstract

An Ultra High Molecular Weight Polyethylene Catalyst and a Process for the Preparation thereof

A process for the preparation of an ultra high molecular weight polyethylene catalyst, comprising: (1) under inert atmosphere, dispersing a magnesium halide in an inert solvent; (2) adding an alcohol to react with the magnesium halide, to form a solution or dispersion of a magnesium halide-alcohol adduct; (3) adding an alkyl aluminum halide to react with the magnesium halide-alcohol adduct, to form an intermediate product; (4) optionally, subjecting the intermediate product to an ultrasonic wave treatment; (5) adding a titanium compound to perform Ti-supporting reaction; (6) optionally, subjecting the reaction mixture from step (5) to an ultrasonic wave treatment; and (7) recovering solid particles, to obtain the ultra high molecular weight polyethylene catalyst, wherein at least one of steps (4) and (6) is present, is disclosed.

No suitable figure