Structure*) wherein a represents about 1 to about 99 mole % b represents about 0 to about 50 mole % c represents about 1 to about 99 mole % a+b+c is preferably about 100%; (*See Patent for Chemical Structure*) B is R2OHCHCH2 C is selected from the group consisting of: (*See Patent for Chemical Structure*) (I) R2OECHCH2; and, (II) (III) combinations thereof. D is OH, halide, OR4, NH2, NHR3, OM', or OM"; E is the residue of the reaction of at least one Lewis Acid with the D substituent of monomer unit B; R1 represents proton, C1-C24 alkyl group, or C3-C24 cycloalkyl; R2 represents C1-C24 alkyl group, C3-C24 cycloalkyl, C6-C18 aryl, or C7-C30 alkylaryl; R3 represents C1-C24 alkyl,C3-C24 cycloalkyl, C1-C24 aryl, or C7-C30 alkylaryl; R4 represents C1-C24 alkyl, C3-C24 cycloalkyl, C1-C24 aryl, or C7-C30 alkylaryl; M' represents alkali metal; M" represents alkaline-earth metal. Also disclosed are polymerization and alkylation processes utilizing the immobilized Lewis Acid catalysts. Another aspect of the present invention is a method of manufacturing immobilized Lewis Acid catalysts.

5602067

PROCESS AND A CATALYST FOR PREVENTING REACTOR FOULING

Nowlin Thomas; Lo Frederick; Shinomoto Ronald; Shirodkar Pradeep P West Windsor, NJ, UNITED STATES assigned to Mobil Oil Corporation

A support containing methylalumoxane and derivatives thereof is described which is formed by an incipient impregnation technique. The most preferred support is silica. Incipient impregnation in accordance with the invention provides a supported alumoxane, methylalumoxane, which substantially eliminates the problem of fluidized bed reactor fouling when methylalumoxane is introduced into the reactor during its operation. In accordance with the invention, the process comprises providing methylalumoxane activated metallocene compound in particulate form as catalysts in fluidized bed gas phase operation.

5604170

SOLID CATALYST COMPONENTS FOR OLEFIN POLEMERIZATION AND USE THEREOF

Sano Akira; Kubo Kunimichi; Matsuura Kazuo; Tajima Yoshio Tokyo, JAPAN assigned to Nippon Oil Company Limited

An effective catalyst carrier for use in the polymerization of olefins is provided. Said carrier comprises particles of silicon oxide or aluminum oxide satisfying the following characteristics (A) to (E): (A) An average particle diameter as measured by the sieving method is in the range of 20 to 150 mum. (B) A specific surface area as measured by the BET method is in the range of 150 to 600 m2/g. (C) The volume of pores ranging in pore radius from 18 to 1,000 Angstroms as measured by the mercury penetration method is in the range of 0.3 to 2.0 cm3/g. (D) An apparent specific gravity as measured according to JIS K6220-6.8 is not lower than 0.32. (E) After the particles classified in the range of between 53 mum and 75 mum by the sieving method have been subjected to an ultrasonic disintegration treatment at 40 KHz, 35 W, for 20 minutes, the proportion of 50 mum or smaller particles, i.e., degree of ultrasonic disintegration, is not more than 30%.

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CATALYTIC SYSTEM WHICH MAY BE USED FOR THE POLYMERIZATION OF ALPHA-OLEFINS AND PROCESS FOR THIS POLYMERIZATION

Collette Hervacu Pamart Sabine Namur, BELGIUM assigned to Solvay (Sociacu etacu e Anonyme)