5629256

CATALYST SYSTEM FOR THE SYNTHESIS OF RUBBERY POLYMERS

Halasa Adel F; Austin Laurie E; Weakland Susan Bath, OH, UNITED STATES assigned to The Goodyear Tire & Rubber Company

The subject invention relates to an anionic polymerization technique for synthesizing rubbery polymers of conjugated diolefin monomers, such as rubbery copolymer of alpha-methylstyrene and 1,3-butadiene. These rubbery copolymers exhibit an excellent combination of properties for utilization in tire tread rubber compounds. They have high trans-isomer contents which leads to good treadwear characteristics and a broad molecular weight distribution which enhances processability. This invention more specifically discloses a process for the synthesis of rubbery polymers which have a broad molecular weight distribution and which are particularly useful in tire tread rubber compounds, said process comprising the polymerization of at least one conjugated diolefin monomer in an organic solvent in the presence of a catalyst system which is comprised of (a) a dialkyl magnesium compound and (b) an alkali metal containing compound selected from the group consisting of alkali metal alkoxides, alkali metal phenoxides, alkali metal sulfoxides,alkali metal sulfonates, alkali metal carboxylates, alkyl substituted alkali metal phenoxides, alkali metal alkylamines, and alkali metal dialkylamines; wherein the molar ratio of the alkali metal containing compound to the dialkyl magnesium compound is within the range of about 6:1 to about 1:5. In cases where rubbery copolymers containing alpha-methylstyrene are being synthesized the alkali metal in the alkali metal containing compound will normally be potassium, rubidium, or cesium with cesium being most preferred.

5629405

METHOD FOR MAKING POLYARYLENE ETHERS WITH PYRIDINE CATALYSTS

White Dwain Schenectady, NY, UNITED STATES assigned to General Electric Company

A method for making polyarylene ethers is described and the method comprises the step of polymerizing hydroxyaromatic monomers or oligomers prepared therefrom in the presence of pyridine catalysts.

FINE CHEMICALS

5599963

CATALYSTS FOR PRODUCTION OF BETA-HYDROXY CARBONYL COMPOUNDS

Carreira Erick M; Singer Robert A Pasadena, CA, UNITED STATES assigned to California Institute of Technology

The invention relates to catalysts for the synthesis of beta-hydroxy carbonyl compounds, and in particular to enantioselective catalysts.

5599999

PROCESS FOR PREPARATION FOR ALKANOLAMINE, CATALYST USED IN THE PROCESS AND PROCESS FOR PREPARATION OF THE CATALYST

Moriya Atusi; Tsuneki Hideak Yokohama, JAPAN assigned to Nippon Shokubai Co Ltd