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(54) Title: HDPE INTERMEDIATE BULK CONTAINER RESIN USING ADVANCED CHROME CATALYST BY POLYETHYLENE GAS PHASE TECHNOLOGY

(57) Abstract: According to one embodiment, a process for producing unimodal ethylene/ α -olefin copolymer, the process comprising contacting ethylene and, optionally, one or more (C_3-C_{12}) α -olefin comonomers with a catalyst system in a gas-phase polymerization reactor, wherein the catalyst system comprises a chromium-based catalyst; wherein the unimodal ethylene copolymer comprises: a density from 0.942 g/cm³ to 0.950 g/cm³ according to ASTM D792-13; a flow index (I_{21}) from 5.5 to 7.5 dg/min, when measured according to ASTM D1238 at 190 °C and a 21.6 kg load; a strain hardening modulus of 40 to 50 MPa; and a molecular weight distribution (MWD) as determined by a conventional gel permeation chromatography method or absolute gel permeation chromatography.

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