

ABSTRACT**MULTIMODAL POLYETHYLENE POLYMERS AND PROCESS PREPARING SAID
POLYMER**

The present invention provides a polyethylene comprising: (i) 20-70% wt of a lower molecular weight ethylene polymer; (ii) 20-70% wt of a first higher molecular weight ethylene copolymer; and (iii) 0.5-9.5% wt of a second higher molecular weight ethylene copolymer. The present invention also provides a process for the preparation of a polyethylene comprising: (i) 20-70% wt of a lower molecular weight ethylene polymer; (ii) 20-70% wt of a first higher molecular weight ethylene polymer; and (iii) 0.5- 30% wt of a second higher molecular weight ethylene polymer, wherein said process comprises the sequential steps (a)-(c): (a) polymerising ethylene and optionally an α -olefin comonomer in a first reactor to produce a lower molecular weight ethylene polymer; (b) polymerising ethylene and optionally an α -olefin comonomer in a second reactor to produce a second higher molecular weight ethylene polymer; and (c) polymerising ethylene and optionally an α -olefin comonomer in a third reactor to produce a first higher molecular weight ethylene polymer.

Figure 1