CLAIMS

1. A film comprising at least 95 wt.% ethylene-based polymer, wherein:

the ethylene-based polymer is a trimodal polymer comprising the polymerized reaction product of ethylene, C_3-C_{14} α-olefin monomer, and optionally polyene; and

wherein the film comprises a normalized dart strength (DS) in g/mil that is greater than or equal to 400 + 1400 / (MS - 2.7), wherein normalized DS is dart strength measured in gram (g) according to ASTM 1709 Method A divided by the film thickness in mil, wherein MS is the melt strength of the ethylene-based polymer measured in centiNewtons (cN) (Rheotens device, 190°C, 2.4 mm/s^2, 120 mm from the die exit to the center of the wheels, extrusion rate of 38.2 s^{-1}, capillary die of 30 mm length, 2 mm diameter and 180° entrance angle), and wherein the MS is at least 4 cN.

2. The film of claim 1, wherein the film is substantially free of any other polymeric component.

3. The film of any preceding claim, wherein the film is a monolayer or multilayer film.

4. The film of any preceding claim, wherein the ethylene-based polymer is the polymerized reaction product of ethylene, C_3-C_{12} α-olefin, and polyene.

5. The film of any preceding claim, wherein the ethylene-based polymer has a rheology ratio $V_{0.1}/V_{100}$ from 4.0 to 12, wherein $V_{0.1}$ is the viscosity of the ethylene-based polymer at 190 °C at an angular frequency of 0.1 radians/second, and V_{100} is the viscosity of the ethylene-based polymer at 190 °C at an angular frequency of 100 radians/second.

6. The film of claim 5, wherein the rheology ratio $V_{0.1}/V_{100}$ is from 4.0 to 8.0.

7. The film of any preceding claim, wherein the ethylene-based polymer has an I_2 of 0.5 to 2.0 dg/min as measured according to ASTM D1238 (2.16 Kg/190 °C).

8. The film of any preceding claim, wherein the ethylene-based polymer has a density of 0.910 to 0.935 g/cc.

9. The film of any preceding claim, wherein the ethylene-based polymer has an MWD of 3.0

to 5.0, MWD is defined as M_w/M_n with M_w being a weight average molecular weight and M_n being a number average molecular weight as measured according to conventional Gel Permeation Chromatography.

10. The film of any preceding claim, wherein the melt strength (MS) is from 4.0 to 25 cN, or from 8.0 to 15 cN.

11. The film of any preceding claim, wherein the normalized DS of the film is from 750 to 1750 g/mil.

12. The film of any proceeding claims, where the normalized DS in g/mil is greater than or equal to 430 + 2000 / (MS - 2.4).

13. The film of any proceeding claims, where the normalized DS in g/mil is greater than or equal to 400 + 2736 / (MS - 2.2).

14. The film of any proceeding claims, where the normalized DS in g/mil is greater than or equal to 390 + 3900 / (MS - 2.5).

15. The film of any proceeding claims, wherein the film has an average thickness of 1.0 to 3.0 mil.