Claims

1. A layered film structure comprising a core layer C and external layers E1 and E2 wherein core layer C comprises

   a) a high-pressure produced polyethylene component (AC) which is a LDPE having an MFR_2 determined according to ISO 1133 of from 0.25 to 2 g/10min and a density of 0.915 to 0.930 g/cm^3 in an amount of from 40 to 80 wt.% of the core layer and

   b) a catalytically produced polyethylene component (BC) which is either a ethylene polymer having an MFR_2 determined according to ISO 1133 of from 0.5 to 10 g/10min and a density of 0.910 to 0.935 g/cm^3 (BC1) and/or an ethylene polymer having an MFR_2 determined according to ISO 1133 of from 0.05 to 0.4 g/10min and a density of 0.925 to 0.945 g/cm^3 (BC2) in a total amount of from 20 to 40 wt.% of the core layer, and

   c) a catalytically produced polyethylene component (CC) which is a polyethylene having an MFR_2 determined according to ISO 1133 of from 0.2 to 2 g/10min and a density of from 0.950 to 0.970 g/cm^3 in an amount of from 0 to 30 wt.% of the core layer,

   and wherein external layer(s) E1 and/or E2 comprise(s)

   a) a high-pressure produced polyethylene component (AE) which is a LDPE having an MFR_2 determined according to ISO 1133 of from 0.25 to 2 g/10min and a density of 0.915 to 0.930 g/cm^3, and

   b) a catalytically produced polyethylene component (BE) which is either a multimodal ethylene terpolymer having an MFR_2 determined according to ISO 1133 of from 0.5 to 10 g/10min and a density of 0.920 to 0.933 g/cm^3 (BE1) and/or an ethylene polymer having an MFR_2 determined according to ISO 1133 of from 0.05 to 0.4 g/10min and a density of 0.925 to 0.945 g/cm^3 (BE2) in a total amount of from 40 to 85 wt.% of the external layer.

2. Film structure according to claim 1 wherein ethylene polymer component BC1 is a multimodal ethylene terpolymer.

3. Film structure according to claim 1 or 2 wherein the multimodal ethylene terpolymer of component (BC1) and/or (BE1) independently comprises a

multimodal polymer of ethylene with at least two different comonomers selected from alpha-olefins having from 4 to 10 carbon atoms, which has a ratio MFR_{21}/MFR_2 of 13 to 30 and a MWD of 5 or less, determined by Gel Permeation Chromatography (GPC) according to ISO 16014-1:2003, ISO 16014-2:2003, ISO 16014-4:2003 and ASTM D 6474-12.

4. Film structure according to any one of the preceding claims wherein the film structure has a thickness of 75 micrometer or lower.

5. Film structure according to any one of the preceding claims wherein core layer C has a thickness making up 50 to 70 % of the total film structure thickness and/or wherein external layer(s) E1 and/or E2 has/have a thickness making up 15 to 25 % of the total film structure thickness.

6. Film structure according to any one of the preceding claims wherein external layers E1 and E2 have the same composition.

7. Film structure according to any one of the preceding claims wherein the film structure has a tensile modulus in machine direction measured according to ISO 527-3 of 320 to 500 MPa and/or wherein the film structure has a tensile strength at break measured according to ISO 527-3 in transverse direction of at least 35 MPa.

8. Film structure according to any one of the preceding claims wherein the film structure has a puncture resistance measured as a puncture energy on a 60 micrometer thick film of at least 2.5 J, determined according to ASTM D5748 on 60/45 micron blown films.

9. Film structure according to any one of the preceding claims wherein the film structure has a seal initiation temperature of from 105 to 125 °C, preferably from 109 °C to 123 °C, determined according to ASTM F 2029 and ASTM F 88.

10. Film structure according to any one of the preceding claims wherein the film structure has a shrinkage in oil at 160 °C in transverse direction measured on a 60 micrometer thick film of 10 % or higher, determined according to ISO 11501.

11. Film structure according to any one of the preceding claims wherein the film structure further comprises one or more intermediate layer(s) in between core layer C and one of external layers E1 and/or E2.

12. A process for producing a film structure according to any one of the preceding claims wherein the layers of the film structure are co-extruded.

13. A collation shrink film comprising a film structure according to any one of claims 1 to 11.

14. Use of a collation shrink film according to claim 13 for wrapping of articles.