+135-3858-6433 (GuangDong)
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TOTAL
Refining & Chemicals
Polymers

Polyethylene Lumicene® mPE M 3427

Technical data sheet
Metallocene Polyethylene CAST FILM
Produced in Europe

Description

Lumicene® mPE M 3427 is a second generation metallocene based Polyethylene with hexene as comonomer.

Lumicene® mPE M 3427 can be processed at high output rates with low extrusion pressure, low neck-in, excellent drawability and good gauge control in comparison with conventional LLDPE and first generation metallocene based polyethylene. The combination of these features combined with excellent optical properties brings a significant downgauging potential.

Lumicene® mPE M 3427 is suited for many applications in the field of consumer, food and hygiene packaging such as hygiene film, stretch wrap (non cling layer) and lamination.

Characteristics

Property	Method	Unit	Typical value
Density	ISO 1183	g/cm³	0.934
Melt Flow Rate (190°C/2.16 kg)	ISO 1133	g/10 min	3.1
Melting temperature	ISO 11357	°C	123
Vicat temperature	ISO 306	°C	120

Values indicated are typical for this product. Density and MFR are properties routinely measured during "the standard quality control procedure". The other figures are generated by tests not included in the "standard quality control procedure", and are given for information only. Data are not intended for specification purposes.

Processing

On a cast film line Lumicene® mPE M3427 can be easily extruded in the following conditions:

- Melt temperature : 240 to 280°C
- Chill roll temperature : 20 to 60 °C

Additives

Antioxidant : yes
PPA : no

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Cast film properties

These values have been measured on a 20 um cast film.

Property	Method	Unit	Typical value (*)
Tensile Strength at Yield MD/TD (**)	ISO 527-3	MPa	12.0/11.5
Tensile Strength at Break MD/TD (**)	ISO 527-3	MPa	39/27
Elongation at Break MD/TD (**)	ISO 527-3	%	480/590
Elmendorf MD/TD (**)	ISO 6383-2	N/mm	21/115
Dart test	ISO 7765-1	g	53
Haze	ISO 14782	%	2.3
Gloss 45°	ASTM D2457		86

(*) Figures stated hereabove are obtained using laboratory test specimens produced at the following extrusion conditions: die gap = 250 µm, chill roll temperature = 20°C, throughput = 7 kg/h, melt temperature = 260 °C

(**) MD : Machine Direction, TD : Transverse Direction