+135-3858-6433 (GuangDong)
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+852-6957-5415 (HongKong)

TOTAL

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Polyethylene Lumicene® mPE M 2009 EP

Technical data sheet
Metallocene Polyethylene BLOWN FILM
Produced in Europe

Description

Lumicene® mPE M 2009 EP is a metallocene based Linear Low Density Polyethylene with hexene as comonomer.

Lumicene® mPE M 2009 EP can be processed at high output rates with low extrusion pressure, excellent bubble stability and gauge control in comparison with conventional LLDPE and first generation metallocene based polyethylene.

Lumicene® mPE M 2009 EP is especially dedicated to film applications where excellent mechanical properties in combination to adequate stickiness are required.

Characteristics

Property	Method	Unit	Typical value
Density	ISO 1183	g/cm³	0.920
Melt Flow Rate (190°C/2.16 kg)	ISO 1133	g/10 min	0.9
Melting temperature	ISO 11357	°C	113
Vicat temperature	ISO 306	°C	110

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

Lumicene® mPE M 2009 EP is typically extruded at a melt temperature around 200°C.
Lumicene® mPE M 2009 EP can be blown easily at any of the following conditions:
Temperature: 180 to 230°C

- BUR: 1.5:1 to 4.5:1
- Die gap: 0.8 to 2.8 mm

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Additives

Antioxidant: yes
PPA: yes

Blown film properties

Typical values for a 40 µm blown film.

Property	Method	Unit	Typical value (*)
Tensile Strength at Yield MD/TD (**)	ISO 527-3	MPa	10/10
Tensile Strength at Break MD/TD (**)	ISO 527-3	MPa	55/56
Elongation at Break MD/TD (**)	ISO 527-3	%	600/690
Elmendorf MD/TD (**)	ISO 6383-2	N/mm	90/155
Dart test	ISO 7765-1	g	>1000
Haze	ISO 14782	%	5
Gloss 45°	ASTM D2457		73

(*) Figures stated here above are obtained using laboratory test specimens produced with the following extrusion conditions: 45 mm screw diameter, L/D = 30, die diameter = 120 mm, die gap = 1.4 mm,

BUR = 2.5:1, temperature = 210°C.

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