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Polyethylene Lumicene® mPE M 3410 EP

Technical data sheet
Metallocene Polyethylene BLOWN FILM
Produced in Europe

Description

Lumicene® mPE M 3410 EP is a second generation metallocene based Medium Density Polyethylene with hexene as comonomer.

Lumicene® mPE M 3410 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. The combination of these features brings a significant downgauging potential.

Lumicene® mPE M 3410 EP is especially dedicated to film applications where high gloss and high transparency are required, particularly in blend and in coextrusion with LLDPE or LDPE.

Lumicene® mPE M 3410 EP is suited for many applications in the field of consumer, industrial, food or hygiene packaging such as collation shrink, mailing film, heavy-duty sacks, bags, lamination and hygiene film.

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	0.9
Melting temperature	ISO 11357	°C	124
Vicat temperature	ISO 306	°C	123

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.

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Blown film properties

These values have been measured on a 40 µm blown film.

Property	Method	Unit	Typical value
Tensile Strength at Yield MD/TD (**)	ISO 527-3	MPa	17/18
Tensile Strength at Break MD/TD (**)	ISO 527-3	MPa	47/43
Elongation at Break MD/TD (**)	ISO 527-3	%	630/700
Elmendorf MD/TD (**)	ISO 6383-2	N/mm	20/100
Dart test	ISO 7765-1	g	100
Haze	ISO 14782	%	9
Gloss 45°	ASTM D2457		60

(*) Figures stated hereabove 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

Handling and storage

Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within one year after delivery provided storage conditions are used as given in the SDS of our product. SDS may be obtained from the website: www.polymers.totalenergies.com.

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