



TotalEnergies

Refining & Chemicals
Polymers

Polyethylene Lumicene® mPE M 4707 EP

Technical data sheet
Metallocene Polyethylene BLOWN FILM
Produced in Europe

Description

Lumicene® mPE M 4707 EP is a second generation metallocene based High Density Polyethylene with hexene as comonomer.

Lumicene® mPE M 4707 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 4707 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 4707 EP is suited for many applications in the field of consumer, industrial, food or hygiene packaging such as bags, heavy-duty sacks, automatic packaging, mailing film and lamination.

Characteristics

Property	Method	Unit	Typical value
Density	ISO 1183	g/cm ³	0.947
Melt Flow Rate (190°C/2.16 kg)	ISO 1133	g/10 min	0.7
Melting temperature	ISO 11357	°C	131
Vicat temperature	ISO 306	°C	130

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.

Information contained in this publication is true and accurate at the time of publication and to the best of our knowledge. The nominal values stated herein are obtained using laboratory test specimens. These are typical values not to be construed as specification limits. Before using one of the products mentioned herein, customers and other users should take all care in determining the suitability of such product for the intended use. Unless specifically indicated, the products mentioned herein are not suitable for applications in the pharmaceutical or medical sector. The Companies within TotalEnergies Petrochemicals do not accept any liability whatsoever arising from the use of this information or the use, application or processing of any product described herein. No information contained in this publication can be considered as a suggestion to infringe patents. The Companies disclaim any liability that may be claimed for infringement or alleged infringement of patents.



TotalEnergies

Refining & Chemicals
Polymers

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	24/25
Tensile Strength at Break MD/TD (**)	ISO 527-3	MPa	39/38
Elongation at Break MD/TD (**)	ISO 527-3	%	610/750
Elmendorf MD/TD (**)	ISO 6383-2	N/mm	10/60
Dart test	ISO 7765-1	g	80
Haze	ISO 14782	%	14
Gloss 45°	ASTM D2457		50

(*) 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.

Information contained in this publication is true and accurate at the time of publication and to the best of our knowledge. The nominal values stated herein are obtained using laboratory test specimens. These are typical values not to be construed as specification limits. Before using one of the products mentioned herein, customers and other users should take all care in determining the suitability of such product for the intended use. Unless specifically indicated, the products mentioned herein are not suitable for applications in the pharmaceutical or medical sector. The Companies within TotalEnergies Petrochemicals do not accept any liability whatsoever arising from the use of this information or the use, application or processing of any product described herein. No information contained in this publication can be considered as a suggestion to infringe patents. The Companies disclaim any liability that may be claimed for infringement or alleged infringement of patents.