

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/cm ³	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

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. 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 Total 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.

Cast film properties

These values have been measured on a 20 µm 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

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.totalrefiningchemicals.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. 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 Total 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.