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Polyethylene Lumicene® Supertough 33ST22

Technical data sheet
Metallocene Polyethylene CAST FILM
Produced in Europe

Description

Lumicene Supertough® 33ST22 is a metallocene polyethylene film grade that is especially designed to have an excellent tear resistance and to give a very high toughness – stiffness balance allowing new innovative multilayer film concepts.

Thanks to its innovative design, Lumicene Supertough® 33ST22 will boost the mechanical properties of your packaging, including a superb tear resistance and excellent impact resistance.

Characteristics

Property	Method	Unit	Typical value (*)
Density	ISO 1183	g/cm³	0.933
Melt Flow Rate (190°C/2.16 kg)	ISO 1133	g/10 min	2.2
Melting temperature	ISO 11357	°C	122
Vicat temperature	ISO 306	°C	114

(*) Values indicated are typical for this product. Density and MFR are 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.

Polyethylene

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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	12/12
Tensile Strength at Break MD/TD (**)	ISO 527-3	MPa	27/21
Elongation at Break MD/TD (**)	ISO 527-3	%	370/490
Elmendorf MD/TD (**)	ISO 6383-2	N/mm	70/200
Dart test	ISO 7765-1	g	90
Haze	ISO 14782	%	4
Gloss 45°	ASTM D2457		77

(*) 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.polymers.totalenergies.com.