Technical Data Sheet

Lupolen 2221F

Low Density Polyethylene

Product Description

Lupolen 2221F is a fractional melt index homopolymer LDPE resin designed for film applications requiring an excellent balance of clarity, stiffness, shrink and strength. 2221F is selected by customers for collation shrink films, pallet shrink films, packaging films and heavy duty films where clarity and stiffness are important. 2221F contains an antioxidant.

Regulatory Status

For regulatory compliance information, see *Lupolen* 2221F Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific
Application	Bags & Pouches; Clarity Film; Film Wrap; Food Packaging Film; Heavy Duty Packaging; Industrial Film; Lamination Film; Shrink Film; Surface Protection Film
Market	Flexible Packaging
Processing Method	Blown Film

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	0.80	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.9220	g/cm³	ASTM D1505
Product Density, (23 °C)	0.9220	g/cm³	ASTM D1505
Film			
Dart Drop Impact Strength, F50	150	g	ASTM D1709
Tensile Strength at Break			
MD	25	MPa	ASTM D882
TD	21	MPa	ASTM D882
Tensile Strength at Yield			
MD	11	MPa	ASTM D882
TD	12	MPa	ASTM D882
Tensile Elongation at Break			
MD	400	%	ASTM D882
TD	550	%	ASTM D882
1% Secant Modulus			
MD	220	MPa	ASTM D882
TD	250	MPa	ASTM D882
Elmendorf Tear Strength			
MD	270	g	ASTM D1922
TD	290	g	ASTM D1922
Optical			
Haze	6.5	%	ASTM D1003
Gloss	72		ASTM D2457
Additive			

Slip	None	LYB Method
Antiblock	None	LYB Method

Notes

Data obtained from 50 micron film produced on a 50 mm extruder with a 100 mm die, 205°C melt temperature, 2.5:1 BUR, 0.635 mm die gap at 27 kg/hr.

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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