Technical Data Sheet

Moplen HP5251

LyondellBasell

Polypropylene, Homopolymer

Product Description

Moplen HP5251 is a polypropylene homopolymer designed for the production of biaxially oriented polypropylene films (BOPP). The product is suitable for metallizable film, both as monolayer and in coextruded structures. It contains a standard processing stabilisation but does not contain any slip, antiblocking agents and no Calcium Stearate is intentionally added. *Moplen* HP5251 offers good optical, easy processing and very good film profile. Typical applications are BOPP packaging films and Solid Phase Thermoforming sheets.

Moplen HP5251 is a developmental grade with tragetted final specification similar to *Moplen* HP525J

Regulatory Status

For regulatory compliance information, see *Moplen* HP5251 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Developmental
Availability	Africa-Middle East; Europe
Application	Food Packaging Film; Thermoformed Food Containers
Market	Flexible Packaging
Processing Method	BOPP; Thermoforming
Attribute	Good Processability; High Clarity; High Gloss; Homopolymer; Medium Flow

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(230 °C/2.16 kg)	3.0	g/10 min	ASTM D1238
(230 °C/2.16 kg)	3.0	g/10 min	ISO 1133-1
Density	0.90	g/cm³	ISO 1183-1
(23 °C)	0.90	g/cm³	ASTM D792
Mechanical			
Flexural Modulus	1450	N/mm²	ISO 178
Tensile Strength at Yield	33	MPa	ASTM D638
Tensile Stress at Break, (23 °C, 50 mm/min)	23	N/mm²	ISO 527-1, -2
Tensile Stress at Yield, (23 °C, 50 mm/min)	34	N/mm²	ISO 527-1, -2
Tensile Elongation at Yield	11	%	ASTM D638
Tensile Strain at Break, (23 °C, 50 mm/min)	>=150	%	ISO 527-1, -2
Tensile Strain at Yield, (23 °C, 50 mm/min)	12	%	ISO 527-1, -2
Impact			
Notched Izod Impact Strength, (34 °C)	34	J/m	ASTM D256
Hardness			
Shore Hardness, (Shore D)	70		ISO 868
Thermal			
Vicat Softening Temperature, (A50)	154	°C	ISO 306

Deflection Temperature Under Load			
(0.46 N/mm²)	97	°C	ASTM D648
(0.45 MPa, Unannealed)	85	°C	ISO 75B-1, -2

Notes

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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