

Technical Data Sheet



Moplen HP3644

Polypropylene, Homopolymer

Product Description

Moplen HP3644 is a polypropylene homopolymer designed for the production of biaxially oriented polypropylene films (BOPP). The product is suitable for metallizable film, use in monolayer and in coextruded structures. It contains a standard processing stabilisation but does not contain any slip, antiblocking agents and is Calcium Stearate free.

Moplen HP3644 offers good optical, easy processing and very good film profile. Typical applications are BOPP packaging films and Solid Phase Thermoforming sheets.

Moplen HP3644 is suitable for food contact

Regulatory Status

For regulatory compliance information, see Moplen HP3644 [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	ISO 1133-1
(230 °C/2.16 kg)	3.0	g/10 min	ASTM D1238
Density	0.90	g/cm³	ISO 1183-1
(23 °C)	0.90	g/cm³	ASTM D792
Mechanical			
Flexural Modulus	1500	MPa	ASTM D790
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)	>500	%	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/mm ²)	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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