



## Moplen RP320M

### Polypropylene, Random Copolymer

#### Product Description

"Moplen" RP320M is a controlled rheology slightly modified propylene random copolymer for manufacturing high transparent cast films. It contains no slip or antiblocking agents. It offers excellent processability, high clarity and gloss and good heat weldability. Main applications are packaging of foodstuffs, packaging of books and stationary.

"Moplen" RP320M is suitable for food contact.

For regulatory information please refer to "Moplen" RP320M Product Stewardship Bulletin ( PSB ).

#### Product Characteristics

<b>Status</b>	Commercial: Active
<b>Test Method used</b>	ISO ASTM
<b>Availability</b>	Europe, Africa-Middle East
<b>Processing Methods</b>	Cast Film
<b>Features</b>	High Clarity, Controlled Rheology, Random Copolymer, High Gloss , Good Processability, Weldable
<b>Typical Customer Applications</b>	Cast Film, Food Packaging Film, Stationery Film, Textile Packaging Film

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density	ISO 1183	0.900	g/cm <sup>3</sup>
Melt flow rate (MFR) (230°C/2.16Kg)	ISO 1133	8.0	g/10 min
<b>Mechanical</b>			
Tensile Modulus (1 mm/min)	ISO 527-1, -2	900	MPa
Tensile Stress at Yield (50 mm/min)	ISO 527-1, -2	25.0	MPa
Tensile Strain at Yield (50 mm/min)	ISO 527-1, -2	11	%
<b>Impact</b>			
Charpy notched impact strength (23 °C, Type 1, Edgewise, Notch A)	ISO 179	4.5	kJ/m <sup>2</sup>
(0 °C, Type 1, Edgewise, Notch A)		1.4	kJ/m <sup>2</sup>
<b>Thermal</b>			
Heat deflection temperature B (0.45 MPa) Unannealed	ISO 75B-1, -2	68.0	°C
Vicat softening temperature (A50 (50°C/h 10N))	ISO 306	130	°C

#### Additional Properties

Typical film properties of laboratory casting line:

Gloss 45°, ISO 2813, 50 µm: 91

Haze, ASTM D 1003, 50 µm: <1%

Tensile Young modulus, ASTM D 882, 25 mm/min, 50 µm: 640 MPa

Stress at Yield, ASTM D 882, 500 mm/min, 50 µm, 19.4 MPa

Elongation at Yield, ASTM D 882, 500 mm/min, 50 µm: 6.7%

Stress at break, ASTM D 882, 500 mm/min, 50 µm, 38 MPa

Elongation at break, ASTM D 882, 500 mm/min, 50 µm: 760%

Coefficient of friction, DIN 53375, Static: >0.5

Coefficient of friction, DIN 53375, Dynamic: >0.5