

Data Sheet

HMEL F10SR



F10SR (Equivalent Novolen 1128 N) is a propylene homopolymer and suited for cast film applications with superior slip and antiblocking properties.

Properties (Typical Values)

Properties	Unit	Test method	Value
<u>Melt flow properties</u>			
MFR 230/2.16	g/10 min	ISO 1133	10.5
<u>Mechanical properties</u>			
Tensile modulus of elasticity (v = 1 mm/min)	MPa	ISO 527-2	1500
Tensile yield stress (v = 50 mm/min)	MPa	ISO 527-2	34
Tensile yield strain (v = 50 mm/min)	%	ISO 527-2	9
Tensile strain at break (v = 50 mm/min)	%	ISO 527-2	> 50
Charpy impact strength unnotched + 23 °C	kJ/m ²	ISO 179/1eU	115
Charpy impact strength unnotched -30 °C	kJ/m ²	ISO 179/1eU	14
Charpy impact strength notched + 23 °C	kJ/m ²	ISO 179/1eA	3
Charpy impact strength notched -30 °C	kJ/m ²	ISO 179/1eA	1.5
Ball indentation hardness (H 358/30)	MPa	ISO 2039-1	76
<u>Thermal properties</u>			
<u>Melting point, DSC</u>			
Heat deflection temperature	°C	ISO 3146	163
- HDT/A (1.8 MPa)	°C	ISO 75-2	0
- HDT/B (0.45 MPa)	°C	ISO 75-2	55
Vicat softening temperature	°C	ISO 306	85
- VST/A50 (10 N)	°C	ISO 306	0
- VST/B50 (50 N)	°C	ISO 306	154
- VST/B50 (50 N)	°C	ISO 306	90
<u>Film properties (Cast Film, 50 µm) ¹⁾</u>			
Gloss (20°)	%	ISO 2813	100
Haze	%	ASTM D 1003	2.7
Tear strength (MD/TD)	MPa	DIN 53455	42 / 38
Elongation at break (MD/TD)	%	DIN 53455	680 / 720
Flexural modulus (MD/TD)	MPa	DIN 53121	700 / 760
Dart drop impact strength F50	g	ASTM D1709	280
Coefficient of Friction (dynamic)	-	DIN 53375	0.18
<u>Other properties</u>			
Density	g/cm ³	ISO 1183	0.91

1) The values were determined using film made under our own standardised conditions. When comparing with film manufactured under different conditions, the strong relationship between the film properties and manufacturing conditions must always be taken into account.

Applications

Cast film and water-quenched tubular film (TWQ film)

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