



## Polybutene-1 DP 8220M

### Polybutene-1

#### Product Description

Polybutene-1 grade **DP 8220M** is a random copolymer of butene-1 with medium ethylene content.

This grade is highly compatible with polypropylene due to its similar molecular structure, and it is used to modify the sealing behavior of PP-based films – a typical example is its use to reduce the seal initiation temperature of BOPP sealing layers.

Its relatively slow kinetics of crystallization allow for an excellent wetting behavior. Its highly shear-sensitive flow behavior means that it remains easily dispersible also in even more incompatible polymers like thermoplastic elastomers.

Food law compliance information about this product can be found in separate product documentation.

This product is not intended for use in medical and pharmaceutical applications.

#### Product Characteristics

<b>Status</b>	Commercial: Active
<b>Test Method used</b>	ISO
<b>Availability</b>	Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
<b>Typical Customer Applications</b>	BOPP, Speciality Film

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density	ISO 1183	0.901	g/cm <sup>3</sup>
Melt flow rate (MFR)	ISO 1133		
(190°C/2.16kg)		2.5	g/10 min
(190°C/10kg)		46	g/10 min
<b>Mechanical</b>			
Flexural modulus	ISO 178	140	MPa
Tensile Strength at Yield	ISO 8986-2	10	MPa
Tensile Strength at Break	ISO 8986-2	32	MPa
Tensile Elongation at Break	ISO 8986-2	300	%
<i>Note: Measured on specimens conditioned for 10 days at 20°C</i>			
<b>Thermal</b>			
Melting temperature	DSC		
		97	°C
<i>Note: Tm1</i>		85	°C
<i>Note: Tm2</i>			

#### Additional Properties

Tm2 corresponds with the melting point of crystalline form 2 which is measured immediately after solidification. Tm2 corresponds with the melting point available for each batch on the Certificate of Analysis (COA).

Recommended processing temperatures: 160°C to 180°C. In cases were higher temperatures are required please contact your appropriate technical contact for support.

#### Notes

Typical properties; not to be construed as specifications.