

Refining & Chemicals Polymers

Technical data sheet
Polypropylene – Homopolymer
Produced in Europe

## **Description**

Polypropylene PPH 6080 is a homopolymer with a Melt Flow Index of 9 g/10 min for the cast extrusion of films with excellent optical properties and good sterilizability.

Polypropylene PPH 6080 can be used as single layer films as well as in the core layer of coextruded films, for food packaging, hosiery packaging, shirt packaging, laminations films, ... as well as for stationary supplies.

## **Characteristics**

	Method	Unit	Typical Value
Rheological properties			
Melt Flow Index 230°C/2.16 kg	ISO 1133	g/10 min	9
Mechanical properties			
Tensile Strength at Yield	ISO 527-2	MPa	30
Elongation at Yield	ISO 527-2	%	10
Tensile modulus	ISO 527-2	MPa	1450
Flexural modulus	ISO 178	MPa	1350
Izod Impact Strength (notched) at 23°C	ISO 180	kJ/m²	4
Charpy Impact Strength (notched) at 23°C	ISO 179	kJ/m²	5
Hardness Rockwell - R-scale	ISO 2039-2		95
Thermal properties			
Melting Point	ISO 3146	°C	160
Vicat Softening Point	ISO 306	°C	
50N-50°C per hour			87
10N-50°C per hour			152
Heat Deflection Temperature	ISO 752	°C	
1.80 MPa - 120°C per hour			55
0.45 MPa - 120°C per hour			100
Other physical properties			
Density	ISO 1183	g/cm³	0.905
Bulk Density	ISO 1183	g/cm³	0.525



## **Additional Properties: typical film properties**

	Method	Unit	Typical Value
Optical properties			
Gloss 45°	ASTM D 2457		91
Haze	ISO 14782	%	0.1
Mechanical properties			
Tensile Strength at Yield MD / TD *	ISO 527-3	MPa	23 / 23
Tensile Strength at Break MD / TD *	ISO 527-3	MPa	51 / 42
Tensile Elongation at Break MD / TD *	ISO 527-3	%	650 / 600
Dart Impact	ISO 7765-1	g	270
Elmendorf MD / TD *	ISO 6383-2	N/mm	17 / 20

<sup>\*</sup> MD: Machine Direction TD: Transverse Direction

Properties measured on a  $50\mu m$  thick film produced on a cast film line following TOTAL internal conditions.

When considering these film properties, it should be taken into consideration that film properties are strongly dependent from processing conditions.