

# Polypropylene

## Natural

**DirectPlastics**

...not just a quicker delivery!

PPH / PP-DWST - Homopolymer

Colour: Natural

Density: 0.905g/cm<sup>3</sup>

## Material Data Sheet

Mechanical Properties	Value	Unit	DIN/EN/ISO
Tensile strength at yield	30	MPa	527/D638
Elongation at yield	8	%	527
Modulus of elasticity in tension	1600	MPa	527/D638
Impact strength	No br.	kJ/m <sup>2</sup>	179/D256
Creep rupture strength after 1000hrs with static load	22	MPa	-
Time yield limit for 1% elongation after 1000hrs	4	MPa	-
Coefficient of friction against hardened and ground steel P= 0.05 N/mm <sup>2</sup> , v= 0.6m/s	0.3	-	-
Ball indentation hardness	70	MPa	2039-1
Shore hardness D	70	-	868

Thermal Properties	Value	Unit	DIN/EN/ISO
Glass transition temperature	-18	°C	53736
Crystalline melting point	165	°C	53736
Service temperature (short term)	130	°C	-
Service temperature (long term)	100	°C	-
Coefficient of thermal expansion	17	10 <sup>-5</sup> K	53483/D696
Specific heat	1.7	J/(g*K)	-
Coefficient of thermal conductivity	0.22	W/(K*m)	-

Electrical properties	Value	Unit	DIN/IEC
Surface resistivity	10 <sup>14</sup>	Ohm	60093
Dielectric strength	58	kV/mm	60243-1

Other properties	Value	Unit	DIN/EN/ISO/IEC
Water absorption @ saturation @ 23°C	0.03	%	62
Resistance to hot water, washing soda	Resistant	-	-
Resistance to weathering	No	-	-
Flammability (UL94)	HB	-	-



Direct Plastics Ltd. Unit 14 Portland Business Park, Richmond Park Road, Sheffield, S13 8HS

Tel: 0114 2560889 Email: sales@directplastics.co.uk

The following information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of certain properties or the suitability for a specific application. Existing commercial patents must be observed. A definitive quality guarantee is given in our general conditions of sales.

Unless otherwise stated, these values represent averages taken from injection moulding samples.

We reserve the right of technical alterations.