

# Polypropylene – Stock Shapes

## **Chemical designation**

PP

## **Colour**

Natural/Black

## **Density**

0.91 g/cm<sup>3</sup>

## **Fillers**

<b>Mechanical properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Modulus of elasticity (tensile test)		1350	MPa	DIN 53457	
Tensile strength at yield		32	MPa	DIN EN ISO 527	
Elongation at break		13	%	DIN 53455	
Notched impact strength (Charpy)		7	kJ/m <sup>2</sup>	DIN EN ISO 179	
Ball indentation hardness		70	MPa	DIN EN ISO 2039-1	

  

<b>Thermal properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Service temperature	long term	100	°C		
Thermal expansion (CLTE)	23-60°C, long.	16	10 <sup>-5</sup> *K <sup>-1</sup>	ISO 11359-2	
Thermal conductivity		0.22	W/(K*m)	DIN 52612	

  

<b>Electrical properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Surface resistance		10 <sup>13</sup>	Ω	DIN 53482	
Dielectric strength		>55	kV/mm	DIN 53481	

  

<b>Other properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Water absorption	saturation (23°C)	0.1	%	DIN 53495	
Flammability		HB		UL94	

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