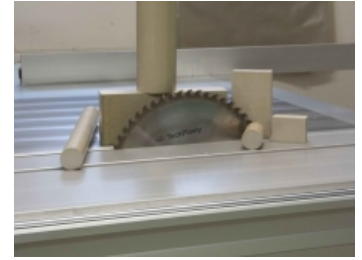


# PP - polypropylene

**Other material names PP:** PP, Polypropylén

**Material group:** Polypropylene

PP material, (chemically known as Polypropylene) is a semi crystalline thermoplastic manufactured by the catalytic polymerization of propene. Polypropylene belongs to the group of polyolefins. Polypropylenes (PP) are universal standard plastics with well balanced properties, providing excellent chemical resistance, high purity, low water absorption and good electrical insulating properties. In addition, PP material is light weight and weldable.



**Color of material:**

White

Gray



**Typical applications:**

- lager-size chemistry devices, sewage plants,
- transport boxes for food and fittings
- trays, simple handles
- body contact plates for mammography



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**The material is used in:**

Beverage industry  
Food industry  
Chemical industry  
Dairy industry  
Meat processing industry  
Engineering industry  
Paper industry  
Waste Management

**Features:**

- Excellent chemical resistance
- Low density
- High purity
- Very low moisture absorption
- High thermal expansion
- No stress crack formation
- Low toughness in minus temperature range, sensitive to impact

**Material availability:** Some sizes are in stock

## Material properties table

<b>Specific weight</b>	0.91 g/cm <sup>3</sup>
<b>Tensibility</b>	70 %
<b>Flexural modulus</b>	1 400 N/mm <sup>2</sup>
<b>Impact toughness</b>	bez zlomu
<b>Notched toughness</b>	>7 kJ/m <sup>2</sup>
<b>Ball hardness</b>	72 N/mm <sup>2</sup>
<b>Sliding wear</b>	11.00 um/km
<b>Abrasive wear</b>	590
<b>Antistatic material</b>	No
<b>Electrical strength</b>	52 kV/mm
<b>Specific internal resistance</b>	10 <sup>(14)</sup> Ω
<b>Specific surface resistance</b>	10 <sup>(13)</sup> Ω.cm
<b>Melting point</b>	165 °C
<b>Thermal expansion</b>	16 10 <sup>(-5)</sup> /K
<b>Thermal conductivity</b>	0.22 W/(K.m)
<b>Permanent use temperature</b>	0 ; 100 °C
<b>Transient temperature of use</b>	0 ; 100 °C
<b>Absorbability</b>	0,1 %
<b>Water absorption</b>	0,1 %
<b>Resistance - oils</b>	resistant
<b>Acid resistance</b>	resistant
<b>Durability - alcali</b>	resistant
<b>Food contact</b>	Yes

Engineering plastics are supplied in the form of bars, plates, strips, tubes and sheets. From the semi-finished products the company TechPlasty has regularly in stock, we also supply blanks.

All standard and special materials are designed to meet your specific requirements. Their mechanical, thermal, and electrical properties and chemical resistance satisfy the most demanding requirements and this allows them to work even in the most difficult conditions. If you need advice when choosing the appropriate material for your application, please contact us. We'll gladly advise you. You can utilize the long-term experience of our technical advisors free-of-charge, who can visit you right in your operation and solve your requirements for engineering plastics directly at the site of their usage.

**TechPlasty, s.r.o.**

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