

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



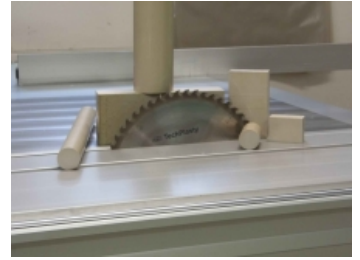
The material is used in:

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

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

Kysucká 7/A
010 01 Žilina
Slovakia

