

TECHNICAL SHEET



PP (Polypropylene)



Equivalence:	ASTM D4101 – 14		----		----	
Available in:	Plate	----	----	----	----	----
Mechanical properties (approx. at room temperature):	Density, g/cm³	Tensile strength, MPa (ksi)		Elastic modulus, MPa (ksi)		Impact resistance, kJ/m² (Izod test)
	0.91	20 (2.9)		600 (87)		40
<small>• The values indicated are minimum estimates, they are not mandatory, and should only be taken as reference in the general characteristics of polypropylenes according to ASTM D4101 - 14. • Special values must be consulted and agreed upon with the manufacturer.</small>						

CHARACTERISTICS

Polypropylene (PP) is a lightweight and corrosion-resistant polymer with various industrial applications.

- It has excellent fatigue resistance and can withstand repeated loads without easily breaking. Additionally, its impact resistance makes it useful in applications where energy absorption is needed, such as protective packaging and packaging applications.
- It is a lightweight and strong material, making it an excellent choice for applications that require durability while also seeking to reduce weight, such as in the automotive industry, in the manufacturing of structural components, and in packaging.
- It has resistance to a wide range of chemicals, including acids, alkalis, and solvents. It is used in applications requiring exposure to chemicals, such as pipes, tanks, and containers.
- Polypropylene is a relatively inexpensive material to produce and recycle, making it an economically attractive option.

APPLICATIONS

PP is used as follows:

- **Automotive Parts:** In the manufacturing of bumpers, interior panels, air vents, and structural components due to its impact resistance, lightweight, and durability.
- **Medical Equipment:** It is found in syringes, bottle caps for medicines, packaging for medical products, and surgical components due to its sterilizability and chemical resistance.
- **Pipes:** In plumbing and industrial applications, PP is used in pipes and hydraulic systems thanks to its corrosion resistance and resistance to a wide range of chemicals.
- **Construction Components:** It is used in a wide range of construction components, including pipes, ducts, panels, and covers.
- **Material Handling Equipment:** Such as conveyor belts, containers, and packaging machines.
- **Furniture:** PP is used in the manufacture of garden furniture, chairs, tables, and storage cabinets due to its weather resistance, durability, and ease of cleaning.

The data provided here is based on current knowledge and aims to provide general information and guidance, as well as its fields of application; therefore, it should not be considered a guarantee of functionality in any type of application