

PP

PP P640J

POLYPROPYLENE IMPACT COPOLYMER (PP)

A polypropylene impact copolymer resin designed for the injection moulding process. This resin is recommended for products that require high impact strength combined with good stiffness and processability.

Typical Application	Product Characteristics	International Compliance
- Automotive parts - Electrical appliance parts - Industrial uses - Furniture - Toys	- High impact strength - Good stiffness - Good processability - Food contact applicable	- U.S. FDA 21 CFR 177.1520 - EU Regulation (EU) No. 10/2011 - Directive 94/62/EC - RoHS Directive 2011/65/EU (RoHS 2) - REACH Regulation (EC) No. 1907/2006 - UL Yellow Card E202743

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate (230°C/2.16 kg)	ASTM D1238	10	g/10 min
Density	ASTM D1505	0.91	g/cm ³
Melting Point	ASTM D2117	163	°C
Vicat Softening Point	ASTM D1525	150	°C
Heat Deflection Temperature (0.45 MPa)	ASTM D648	105	°C
Tensile Strength at Yield	ASTM D638 @ 50 mm/min	27.5	MPa
Tensile Strength at Break	ASTM D638 @ 50 mm/min	19.6	MPa
Flexural Modulus	ASTM D790	1177	MPa
Notched Izod Impact (23°C)	ASTM D256	98	J/m
Notched Izod Impact (0°C)	ASTM D256	59	J/m
Notched Izod Impact (-20°C)	ASTM D256	39	J/m
Rockwell Hardness	ASTM D785	70	R-Scale
Shrinkage, 2 mm (MD)	Internal (TPE method)	1.3	%
Shrinkage, 2 mm (TD)	Internal (TPE method)	1.1	%
Flammability	UL-94	HB	-

Processing Guidelines

Recommended processing conditions: melt temperature 210-250°C, mould temperature 25-70°C, injection speed fast, screw speed 40-70 rpm. Pressure: injection 40-80%, packing and holding 30-60%, back pressure 10% of maximum pressure. Actual processing conditions depend on machine type, product size, mould design, and environment.

1. Tensile and flexural values were converted from the producer's native kgf/cm² units using the stated factor of 10.20 to derive MPa.
2. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.