

Product Description

EL-Pro P440J is an impact copolymer polypropylene resin suitable for injection molding process. This resin is recommended for product that requires high impact strength with good processibility.

Typical Application

- Pail, Crates, Industrial uses
- Automotive and electrical appliance parts
- Furniture, Containers

Product Characteristics

- High impact strength
- Good processibility and stiffness
- Food contact applicable (Complies with U.S FDA 21 CFR 177.1520)

Physical Properties

Property	Test Method	Value	Unit
Melt Flow Rate	ASTM D 1238 @ 230°C, 2.16 kg	5	g/10 min
Density	ASTM D 1505	0.910	g/cm ³
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 50 mm/min	270	kg/cm ²
Tensile Strength at Break	ASTM D 638 @ Crosshead speed 50 mm/min	200	kg/cm ²
Elongation at Break	ASTM D 638 @ Crosshead speed 50 mm/min	520	%
Flexural Modulus	ASTM D 790	11500	kg/cm ²
Notched Izod Impact	ASTM D 256 @ 23°C	12	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ 0°C	6	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ -20°C	5	kg.cm/cm
Rockwell Hardness	ASTM D 785	60	R-Scale
Haze	ASTM D 1003	80	%
Gloss	ASTM D 2457	30	%
Melting Point	ASTM D 2117	163, 120	°C
Vicat Softening Point	ASTM D 1525	150	°C
Heat Deflection Temperature (HDT)	ASTM D 648 @ 4.6 kg/cm ²	100	°C
Heat Deflection Temperature (HDT)	ASTM D 648 @ 18.5 kg/cm ²	55	°C
Brittleness Temperature	ASTM D 746	-20	°C
% Shrinkage (2mmT) MD	TPE Method	1.19	%
TD	TPE Method	1.05	%
Flamability	UL - 94	HB	-

Note : Conversion factor for changing unit from kg/cm² to MPa is divided by 10.20

Processing Techniques

The actual processing conditions depend on each machine type, product size, mold design and environment.

Recommended processing conditions:

Melt temperature: 230-270°C	Mold temperature: 25-70°C	Injection speed: Fas	Screw speed 40-70 rpm
Pressure: Injection 40-80%,	Packing and Holding 30-60%,	Back 10%	of Max. Pressure

Product Available Form

Product Handling

- Pellet
- 25 kg loose bag
- Big Bag with specified weight

Product Technical Assistance

For technical assistance or further information on this product or any other EL-Pro products, please contact EL-Pro representatives.

The information presented in this data sheet is offered in good faith. SCG Plastics Co., Ltd. accepts no responsibility for the accuracy or interpretation of the information presented. The users have to establish for yourself the most suitable formulation, production method and control tests, to ensure the uniformity and quality of your product in compliance with all related laws.