

Product Description

EL-Pro P840J is an impact copolymer polypropylene resin suitable for injection molding process. This resin is recommended for product that requires very high processibility with high stiffness.

Typical Application

- Automotive and electrical appliance parts
- Complicated industrial parts
- Any parts require high flowability

Product Characteristics

- High stiffness and processibility
- Good impact strength
- 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	43	g/10 min
Density	ASTM D 1505	0.910	g/cm ³
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 50 mm/min	290	kg/cm ²
Tensile Strength at Break	ASTM D 638 @ Crosshead speed 50 mm/min	180	kg/cm ²
Elongation at Break	ASTM D 638 @ Crosshead speed 50 mm/min	50	%
Flexural Modulus	ASTM D 790	12500	kg/cm ²
Notched Izod Impact	ASTM D 256 @ 23°C	6.5	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ 0°C	4	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ -20°C	3	kg.cm/cm
Rockwell Hardness	ASTM D 785	75	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	110	°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	1.42	%
TD	TPE Method	1.40	%
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: Fast	Screw speed 40-70 rpm
Pressure: Injection 40-80%,	Packing and Holding 30-60%,	Back 10%	of Max. Pressure

Product Available Form

- Pellet

Product Handling

- 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.

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