

Product Description

EL-Pro P842J is an impact copolymer polypropylene resin suitable for injection molding process.

This resin is recommended for product that requires very high stiffness and very high processibility.

Typical Application

- Washing machine parts such as tub, base, panel
- Electrical appliance parts
- Refrigerator parts

Product Characteristics

- Very high stiffness, very high processibility
- Good impact strength and dimension stability
- 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	40	g/10 min
Density	ASTM D 1505	0.910	g/cm ³
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 50 mm/min	295	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	60	%
Flexural Modulus	ASTM D 790	14500	kg/cm ²
Notched Izod Impact	ASTM D 256 @ 23°C	6	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ 0°C	4.5	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ -20°C	3.5	kg.cm/cm
Rockwell Hardness	ASTM D 785	80	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	115	°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	1.44	%
TD	TPE Method	1.30	%
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 Technical Assistance

For technical assistance or further information on this product or any other SCG Chemicals' products contact your SCG Chemicals technical service at the address or telephone number as specified below.

Product Available Form

- Pellet

Product Packaging

- 25 kg loose bag
- Big Bag with specified weight



**Storage**

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene Company Limited/ Thai Polypropylene Company Limited.
- Product(s) should be stored in dry and dust free location at temperature below 50°C and protected from direct sunlight and/or heat, well-ventilated area, away from incompatible materials and food and drink, as this may lead to quality deterioration, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.
- Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
- The storage area should be stable and not be slopped.

Safety

- The product is not classified as a hazardous material.
- Please see our Material Safety Data Sheet for details on various aspects of safety, recovery, and disposal of the products; for more information, contact your SCG Plastics/SCG Performance Chemicals technical service.

Recycling

- The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.
- Please see our Material Safety Data Sheet for details on various aspects of safety, recovery and disposal of the products; for more information, contact your SCG Plastics/SCG Performance Chemicals technical service.

Related Documents

- The latest version of this document will be available at our website, www.chemicals.scg.co.th, or can be obtained from the SCG Plastics/SCG Performance Chemicals technical service.
- The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.
 - Material Safety Data Sheet
 - Statement on compliance to food contact regulations

EL-Lene™ EL-Pro™ EL-Wax™



are registered trademarks of SCG Chemicals, Thailand.

SCG Plastics Company Limited / SCG Performance Chemicals Company Limited