



# TECHNICAL DATA SHEET

Product Name

**EL-Pro™**

Product Type

**Polypropylene High Crystallinity Impact Copolymer**

Product Grade

**P685J**

## Product Description

EL-Pro™ P685J is a high crystallinity impact copolymer polypropylene resin which contains UV stabilizer. This resin is recommended for producing battery case and home appliance part from injection molding process.

## Typical Application

- Battery case
- Home Appliance parts

## Product Characteristics

- High impact strength and stiffness
- Excellent processibility
- Good UV resistance

## International Compliance

- UL Yellow Card
- RoHS

## Physical Properties

Property	Test Method	Typical Value	Unit
Melt Flow Rate	ASTM D 1238 @ 230°C, 2.16 kg	10	g/10 min
Density	ASTM D 1505	0.910	g/cm <sup>3</sup>
Tensile Strength at Yield	ASTM D 638 @ Speed 50 mm/min	280	kg/cm <sup>2</sup>
Tensile Strength at Break	ASTM D 638 @ Speed 50 mm/min	180	kg/cm <sup>2</sup>
Flexural Modulus	ASTM D 790	15000	kg/cm <sup>2</sup>
Notched Izod Impact	ASTM D 256 @ 23 °C	11	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ 0 °C	7	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ -20 °C	6	kg.cm/cm
Rockwell Hardness	ASTM D 785	80	R-Scale
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 <sup>2</sup>	110	°C
% Shrinkage (2mmt) MD	TPE Method	1.1	%
TD	TPE Method	1.1	%
Flamability	UL - 94	HB	-

**Note:** Conversion factor for changing unit from kg/cm<sup>2</sup> to MPa is divided by 10.20.

## Processing Guidelines

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** (of Max. Pressure):

Injection 40-80%

Packing and Holding 30-60%

Back 10%

### Product Technical Assistance

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

## Product Available Form

- Pellet

## Product Packaging

- 25 kg loose bag
- 25 kg stretch wrap palletized
- 750 kg big bag
- Seabulk container



Developmental grade

# TECHNICAL DATA SHEET

Product Name  
**EL-Pro™**

Product Type  
**Polypropylene High Crystallinity Impact Copolymer**

Product Grade  
**P685J**

## 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 odor generation and color 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 sloped.

## Safety

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

## Related Documents

- The latest version of this document will be available at our website, [www.scgchemicals.co.th](http://www.scgchemicals.co.th), or can be obtained from the 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.
  - Safety Data Sheet
  - Statement on compliance to food contact regulations

## Disclaimer

- The product can be used only for the application as specified here above.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.
- We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
- It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.
- No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.