

**Product Description**

EL-Lene H5818J is a general purpose high density polyethylene resin suitable for using in injection molding process. This good flowability grade designed for high productivity requirement.

Typical Application

- General injection parts
- Household product, Office article
- Bottle cap and closure, Toy

Product Characteristics

- Excellent processability
- Good impact resistance
- 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 @ 190°C, 2.16 kg	18	g/10 min
Density	ASTM D 1505	0.962	g/cm ³
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 50 mm/min	280	kg/cm ²
Tensile Strength at Break	ASTM D 638 @ Crosshead speed 50 mm/min	160	kg/cm ²
Elongation at Break	ASTM D 638 @ Crosshead speed 50 mm/min	150	%
Flexural Modulus	ASTM D 790	13000	kg/cm ²
Notched Izod Impact	ASTM D 256 @ 23°C	2.5	kg.cm/cm
Hardness	ASTM D 2240	66	Shore D
ESCR	ASTM D 1693 @ 50°C (Condition B, Compression Molded, 25% Igepal)	2	hrs, F ₅₀
Melting Point	ASTM D 2117	131	°C
Vicat Softening Point	ASTM D 1525	122	°C
Heat Deflection Temperature (HDT)	ASTM D 648 @ 4.6 kg/cm ²	75	°C
Brittleness Temperature	ASTM D 746	- 60	°C
% Shrinkage (2mmt) MD	TPE Method	2.02	%
TD	TPE Method	2.46	%

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: 200-250°C	Mold temperature: 20-60°C	Injection speed: Fast	Screw speed 40-70 rpm
Pressure: Injection 30-70%,	Packing and Holding 30-50%,	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

SCG Plastics Company Limited / SCG Performance Chemicals Company Limited





Technical Datasheet

High Density Polyethylene for Injection Molding

EL-Lene™

H5818J

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.

EL-Lene™ EL-Pro™ EL-Wax™



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