



Product Description

EL-Lene H555J is a high density polyethylene resin with good environmental stress cracking resistance and good organoleptic property. It is particularly designed for injection molding and continuous compression molding of beverage caps and closures.

Typical Application

Beverage caps and closures

- Carbonated soft drink
- Still and mineral water
- Juice and tea

Product Characteristics

- Good environmental stress cracking resistance
- Good mechanical property
- Good organoleptic property
- Food contact applicable (complies with US FDA 21 CFR 177.1520 Olefin Polymers (c) 2.1 and Commission Regulation (EU) no. 10/2011)

Physical Properties

Property	Test Method	Value	Unit
Melt Flow Rate	ASTM D 1238 @ 190 °C, 2.16 kg	1.8	g/10 min
Density	ASTM D 1505	0.956	g/cm ³
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 50 mm/min	260	kg/cm ²
Tensile Strength at Break	ASTM D 638 @ Crosshead speed 50 mm/min	350	kg/cm ²
Elongation at Break	ASTM D 638 @ Crosshead speed 50 mm/min	1,200	%
Flexural Modulus	ASTM D 790	11,000	kg/cm ²
Flexural Strength	ASTM D 790	330	kg/cm ²
Notched Izod Impact	ASTM D 256 @ 23 °C	8	kg.cm/cm
Hardness	ASTM D 2240	64	Shore D
ESCR	ASTM D 1693 @ 50 °C (Condition B, Compression Molded, 10% Igepal)	20	hrs, F ₅₀
Melting Point	ASTM D 2117	131	°C
Heat Deflection Temperature (HDT)	ASTM D 648 @ 4.6 kg/cm ²	78	°C
% Shrinkage (2mm) MD	TPE Method	2.52	%
TD	TPE Method	2.33	%

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

Processing Techniques

The actual processing condition depends on each machine type, product size, mold design. Generally, melt temperature should be 190-230 deg.C for injection molding and 160-190 deg.C for continuous compression molding. The exceed melt temperature than 250 deg.C might effect organoleptic property.

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

Product Packaging

- | | |
|--|---|
| <ul style="list-style-type: none"> ■ Pellet | <ul style="list-style-type: none"> ■ 25 kg loose bag ■ 25 kg stretch wrap palletized ■ 750 kg big bag ■ Seabulk container |
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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.

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