



Technical Datasheet

Product Type

High Density Polyethylene

Product Name

SCGC™ HDPE

Product Grade

H555J

Product Description

SCGC HDPE H555J is a high density polyethylene resin with good processability, good mechanical property, good organoleptic property, and good removal torque. It is particularly designed for injection molding and continuous compression molding of caps and closures for the packaging beverages.

Typical Application

- Beverage caps and closures
- Carbonated soft drink
 - Sparkling water
 - Aseptic beverages
 - Still water with nitrogen filled

Product Characteristics

- Good ESCR
- Good mechanical property
- Good organoleptic property
- With Slip agent for good removal torque

International Compliance

- US FDA 21 CFR 177.1520
- Regulation (EU) No. 10/2011

Physical Properties

Property	Test Method	Typical Value	Unit
Melt Flow Rate (at 190°C, 2.16 kg)	ASTM D1238	1.8	g/10 min
Density	ASTM D1505	0.953	g/cm ³
Tensile Strength at Yield	ASTM D638	260	kg/cm ²
Tensile Strength at Break	ASTM D638	350	kg/cm ²
Elongation at Break	ASTM D638	1,200	%
Flexural Modulus	ASTM D790	11,100	kg/cm ²
Notched Izod Impact Strength (at 23°C)	ASTM D256	78	J/m
ESCR ^A	ASTM D1693	20	Hrs.
Melting Point	ASTM D2117	131	°C
Heat Deflection Temperature (at 4.6 kg/ cm ²)	ASTM D648	78	°C

ESCR ^A = F₅₀, 50°C, condition B, compression molded, 10% Igepal

Note:

- The given values are typical value measured on the product. Values herein are not to be constructed as a product specification.
- Direct food contact is subjected to the extraction provisions of the regulation on the finished food contact package.

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Processing Guidelines

The actual processing condition depends on each machine type, product size and mold design. Generally, melt temperature should be 190-230°C for injection molding and 160-190°C for continuous compression molding. The exceed melt temperature than 250°C might affect 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 services at the address as specified below.

Product Available Form

- Pellet

Product Packaging

- 25 kg loose bag
- 25 kg stretch wrap palletized
- 750 kg big bag
- Sea bulk container

Storage

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene 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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