

Introduction of **SM600Q**

- New Generation Grade of Injection Molding

LUCENE™ SM600Q

High Density Polyethylene

LUCENE™ Technology

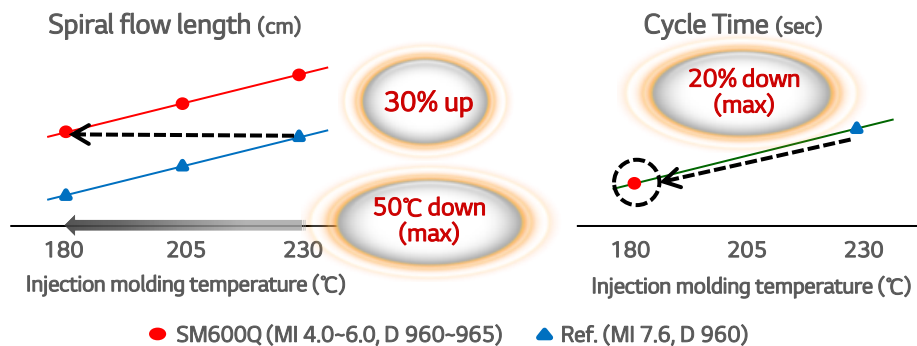
- LUCENE SM600Q* is a new high density polyethylene based on LG's proprietary metallocene technology with excellent mechanical and processing properties.
- * Q : This code means "under development" and it is possible to be modified.

Application

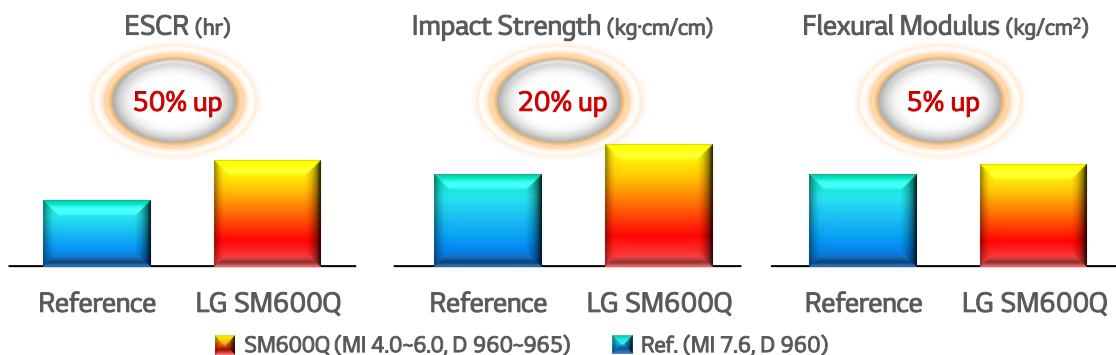
- Caps & closures for injection molding

Characteristics & Advantages

- Excellent processing performance
 - The flowability is 30% higher, processing temperature could be reduced (max 50°C)
 - Higher productivity & energy saving by decreasing the injection molding temperature



- Enhanced mechanical properties
 - Better qualities of modulus, impact strength and ESCR
 - Down gauging by controlling injection molding condition or thickness of product



Processing guide

- LUCENE-H **SM600Q** has higher fluidity than that of traditional grade, and thus it is recommended to reduce injection molding temperature (max 50°C) and cooling time (max 20%).

LUCENE™ SM600Q

High Density Polyethylene

Applications

- Cap & Closure for beverage bottles of still mineral water and juice

Description

- LUCENE **SM600Q*** is mainly intended for injection molding of bottle caps and closures.
 * Q : This code means "under development" and it is possible to be modified.
- It has excellent processing performance
- Without slip agent

Typical properties

Characteristics	Test Method	Unit	Value
Physical⁽¹⁾			
Density	ASTM D1505	g/cm ³	0.960~0.965
MFR(190°C,2.16Kg)	ASTM D1238	g/10min	4.0~6.0
Softening Point (Vicat)	ASTM D1525	°C	123~127
Mechanical⁽²⁾			
Tensile Strength at Yield point	ASTM D638 ⁽³⁾	kg/cm ²	280~320
Elongation at Break	ASTM D638 ⁽³⁾	%	>500
Shore hardness(Shore D)	ASTM D2240	-	64~68
Flexural Modulus1% Secant	ASTM D790	kg/cm ²	12,000~15,000
IZOD Impact Strength at 23°C (notched)	ASTM D256	kg·cm/cm	6.0~10.0
Thermal			
Melting Temperature	LG	°C	133

(1) The properties data in this table are typical values, and not guaranteed specification.

(2) Typical resin property values are measured on a standard compression molded specimens

(3) Speed of 50 mm/min.

Processing information

- LUCENE **SM600Q** may be processed on conventional equipment. It is recommended that the melt temperature be kept below 250°C as decomposition can occur at higher temperature.

For additional sales, order and technical assistance

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