



Technical Data Sheet

Product Name
SCGC™ PP

Product Type
Polypropylene Copolymer Resin

Product Grade
P686J

Product Description

SCGC™ PP P686J is polypropylene impact copolymer resin which contains nucleating agent. It is designed for injection molding process. This resin is recommended for product that that requires high impact strength with high stiffness and good productivity.

Typical Application

- Pail, Crate, Container
- Automotive parts
- Electrical appliance parts
- Industrial parts

Product Characteristics

- High impact strength
- High stiffness
- Good productivity
- Food contact applicable

International Compliance

- U.S. FDA 21 CFR 177.1520
- Regulation (EU) No.10/2011
- Directive 94/62/EC
- RoHS Directive 2011/65/EU (RoHS 2)
- REACH Regulation (EC) No. 1907/2006

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate	ASTM D 1238 @ 230 °C, 2.16 kg	10	g/ 10 min
Density	ASTM D 1505	0.91	g/cm ³
Melting Point	ASTM D 2117	163	°C
Heat Deflection Temperature (HDT)	ASTM D 648 @ 4.6 kg/cm ²	115	°C
Tensile Strength at Yield	ASTM D 638 @ Speed 50 mm/min	290	kg/cm ²
Tensile Strength at Break	ASTM D 638 @ Speed 50 mm/min	250	kg/cm ²
Flexural Modulus	ASTM D 790	13,500	kg/cm ²
Notched Izod Impact	ASTM D 256 @ 23 °C	120	J/m
Notched Izod Impact	ASTM D 256 @ 0 °C	80	J/m
Notched Izod Impact	ASTM D 256 @ -20 °C	50	J/m
Rockwell Hardness	ASTM D 785	60	R-Scale
% Shrinkage (2mmt) MD	TPE Method	1.3	%
TD	TPE Method	1.3	%

Note: - The given values are typical value measured on the product. Values herein are not to be constructed as a product specification.
- Conversion factor for changing unit from kg/cm² to MPa is divided by 10.20.

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Processing Guidelines

The actual processing conditions depend on each machine type, product size, mold design and environment.

Recommended processing conditions:

Melt temperature: 210-250 °C Mold temperature: 25-70 °C Injection speed: Fast Screw speed: 40-70 rpm
Pressure: Injection: 40-80 % Packing and Holding: 30-60% 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 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 sloped.

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