



# Technical Data Sheet

Product Name  
**SCGC™ PP**

Product Type  
**Polypropylene Copolymer Resin**

Product Grade  
**P440J**

## Product Description

SCGC™ PP P440J is polypropylene impact copolymer resin. It is designed for injection molding process. This resin is recommended for product that that requires high impact strength with good stiffness.

## Typical Application

- Pail, Crates, Industrial uses
- Automotive parts
- Electrical appliance parts
- Furniture, Containers

## Product Characteristics

- High impact strength
- Good stiffness
- 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
- UL Yellow card – E202743

## Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate	ASTM D 1238 @ 230 °C, 2.16 kg	5	g/ 10 min
Density	ASTM D 1505	0.91	g/cm <sup>3</sup>
Melting Point	ASTM D 2117	163	°C
Vicat Softening Point	ASTM D 1525	150	°C
Heat Deflection Temperature (HDT)	ASTM D 648 @ 4.6 kg/cm <sup>2</sup>	100	°C
Tensile Strength at Yield	ASTM D 638 @ Speed 50 mm/min	270	kg/cm <sup>2</sup>
Tensile Strength at Break	ASTM D 638 @ Speed 50 mm/min	200	kg/cm <sup>2</sup>
Flexural Modulus	ASTM D 790	12,500	kg/cm <sup>2</sup>
Notched Izod Impact	ASTM D 256 @ 23 °C	118	J/m
Notched Izod Impact	ASTM D 256 @ 0 °C	65	J/m
Notched Izod Impact	ASTM D 256 @ -20 °C	49	J/m
Rockwell Hardness	ASTM D 785	60	R-Scale
% Shrinkage (2mmt) MD	TPE Method	1.2	%
TD	TPE Method	1.1	%
Flammability	UL-94	HB	-

**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/cm<sup>2</sup> to MPa is divided by 10.20.

Thai Polyethylene Co., Ltd.





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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 slopped.

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