



# Technical Data Sheet

Product Name  
**SCGC™ PP**

Product Type

**Polypropylene Resin**

Product Grade

**P704JM**

## Product Description

SCGC PP P704JM is a homopolymer polypropylene resin that is well-suited to healthcare and pharmaceutical products. P704JM has good processability, high clarity and is compliant to FDA and USP requirements. P704JM can be injection molded and sterilized by ethylene oxide.

## Typical Application

- Syringe barrel
- Cylindrical test tubes
- Contact lens mold shell
- Applications required high transparency

## Product Characteristics

- High transparency
- High stiffness
- Easy processing

## International Compliance

- Food contact applicable (Complies with U.S. FDA 21 CFR 177.1520)
- Complies with USP class VI

Notice : It is strongly recommended that all potential activities for applications related to pharmaceutical, medical device, laboratory and diagnostics area have to be discussed with technical services department first. It is responsibility of customers to determine that the product is safe, lawful and technically suitable for the intended use. Thai Polyethylene Company Limited/Thai Polypropylene Company Limited makes no warranties concerning the suitability of SCG Chemicals' product for using in any given medical application.

## Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate	ASTM D 1238 @ 230 °C, 2.16 kg	12	g/10 min
Density	ASTM D 1505	0.910	g/cm <sup>3</sup>
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 50 mm/min	420	kg/cm <sup>2</sup>
Elongation at Break	ASTM D 638 @ Crosshead speed 50 mm/min	600	%
Flexural Modulus	ASTM D 790	15,000	kg/cm <sup>2</sup>
Notched Izod Impact Strength	ASTM D 256 @ 23 °C	34	J/m
Rockwell Hardness	ASTM D 785	100	R-Scale
Haze	ASTM D 1003	20	%
Melting Point	ASTM D 2117	163	°C
Vicat Softening Point	ASTM D 1525	155	°C
Heat Deflection Temperature (HDT)	ASTM D 648 @ 4.6 kg/cm <sup>2</sup>	115	°C
% Shrinkage (2 mm.) MD	TPE Method	1.5	%
TD	TPE Method	1.4	%

(% Shrinkage depending on wall thickness and molding parameter)

- 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.

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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 210-250 °C for injection molding, Mold temperature: 20-50 °C and 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 technical services at the address as specified below.

### Product Available Form

- Pellet

### Product Packaging

- 25 kg loose bag
- 25 kg stretch wrap palletized

### 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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