



# Technical Datasheet

Product Name

**SCGC™ PP**

Product Type

**Polypropylene**

Product Grade

**P607F**

## Product Description

SCGC PP P607F is a homopolymer polypropylene resin without slip and antiblock agent designed for core layer of co-extrusion cast film, monolayer cast film application with high stiffness & clarity, and flat yarn with high tenacity for high speed slit tape machine with balance good mechanical properties for yarn application.

## Typical Application

- Snack pouch
- Laminated film
- Metallized film
- Woven bag
- High speed slit tape

## Product Characteristics

- High film stiffness/Good yarn tenacity
- Good clarity
- Good processability
- High productivity
- Good mechanical properties

## International Compliance

- U.S FDA 21 CFR 177.1520
- Regulation (EU) No.10/2011
- Packaging and Packaging waste Directive 94/62/EC
- RoHS: Directive 2011/65/EU

**Note:** Direct food contact is subjected to the extraction provisions of the regulation on the finished food contact package.

## Physical Properties

| Property                           | Test Method                         | Typical Value        | Unit               |
|------------------------------------|-------------------------------------|----------------------|--------------------|
| <b>Resin Properties</b>            |                                     |                      |                    |
| Melt Flow Rate                     | ASTM D 1238 @ 230°C, 2.16 kg        | 7.0                  | g/10 min           |
| Density                            | ASTM D 1505                         | 0.910                | g/cm <sup>3</sup>  |
| Melting Point                      | ASTM D 2117                         | 162                  | °C                 |
| Vicat Softening Point              | ASTM D 1525                         | 154                  | °C                 |
| <b>Typical physical Properties</b> |                                     |                      |                    |
| Heat Deflection Temperature (HDT)  | ASTM D 648 @ 4.6 kg/cm <sup>2</sup> | 115                  | °C                 |
| Tensile Strength at Yield          | ASTM D 638                          | 350                  | kg/cm <sup>2</sup> |
| Tensile Strength at Break          | ASTM D 638                          | 200                  | kg/cm <sup>2</sup> |
| Elongation at Break                | ASTM D 638                          | 150                  | %                  |
| Flexural Modulus                   | ASTM D 790                          | 13,450               | kg/cm <sup>2</sup> |
| Notched Izod Impact Resistance     | ASTM D 256 @ 23 °C                  | 33                   | J/m                |
| <b>Film Properties</b>             |                                     |                      |                    |
| Tensile Strength at Yield          | ASTM D 882                          | MD: 28.4*, TD: 22.6* | MPa                |
| Tensile Strength at Break          | ASTM D 882                          | MD: 36.3*, TD: 8.82* | MPa                |
| Tensile Modulus, 2% Secant         | ASTM D 882                          | MD: 510*, TD: 382*   | MPa                |
| Elongation at Break                | ASTM D 882                          | MD: 470*, TD: 20*    | %                  |
| Flexural modulus                   | ASTM D 790                          | 1600*                | MPa                |
| Haze                               | ASTM D 1003                         | 9                    | %                  |
| Gloss                              | ASTM D 2457                         | 84                   | %                  |

**Note:** - The given values are typical value measured on the product. Values herein are not to be constructed as a product specification.

- (\*) Properties obtained from experiment on a pilot line, Film thickness 25 micron, MD = Machine Direction, TD = Transverse Direction.

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## Processing Guidelines

### Recommended processing conditions:

- Cast Film: The actual extrusion condition depends on type of using machine, size and film thickness of product required. Generally, melt temperature should be around 200-230°C.
- Flat yarn: Processing temperature around 190 – 260 °C, Stretching Temperature 140 – 160 °C, Stretching Ratio 5 – 7 these conditions are only guideline. Actual processing conditions depends on machine type, screw configuration, product design and environment.

### Product Technical Assistance

For technical assistance or further information on this product or any other SCG Chemicals' products contact your SCG Chemicals technical service at the address or telephone number 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
- The storage area should be stable and not be slopped.

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