Technical Data Sheet

Product Name
SCGC™ PP

Product Type
Polypropylene Resin

Product Grade
P705JM

Product Description

SCGC PP P705JM is homopolymer polypropylene resin that is well-suited to healthcare and pharmaceutical products. P705JM has good processability, high stiffness and is compliant to FDA, USP, and EP requirements.P705JM can be injection molded and sterilized by ethylene oxide.

Typical Application

- Syringe plunger
- Specimen cup
- Applications required high stiffness

Product Characteristics

- High stiffness
- Easy processing

International Compliance

- Food contact applicable (Complies with U.S. FDA 21 CFR 177.1520)
- Complies with USP class VI
- Complies with EP 3.1.6
- DMF no. 30046

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^3
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 50 mm/min	320	kg/cm^2
Elongation at Break	ASTM D 638 @ Crosshead speed 50 mm/min	650	%
Flexural Modulus	ASTM D 790	14,500	kg/cm^2
Notched Izod Impact Strength	ASTM D 256 @ 23 °C	29	J/m
Rockwell Hardness	ASTM D 785	90	R-Scale
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/cm2	110	°C
% Shrinkage (2 mm.) MD	TPE Method	1.1	%
TD	TPE Method	1.1	%

(% 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^2 to MPa is divided by 10.20.

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Manufacturer website: https://www.scgchemicals.com/en

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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.

Safety

- The product is not classified as a hazardous material.
- Please see our Material Safety Data Sheet for details on various aspects of safety, recovery, and disposal of the products; for more information, contact your SCG Chemicals technical services.

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Recycling

- The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.
- Please see our Material Safety Datasheet for details on various aspects of safety, recovery and disposal of the products; for more information, contact your SCG Chemicals technical services.

Related Documents

- The latest version of this document will be available at our website, www.scgchemicals.com, or can be obtained from the SCG Chemicals technical services.
- The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.
    - Safety Data Sheet.
    - Declaration of Compliance.

Disclaimer

- The Applications specified herein is for reference only.
- It is customer's responsibilities to inspect and test the product for suitability of the customer's own use and purpose. The customer is responsible for appropriate, safe, legal use, processing and handling of the product.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. We however do not assume any liability whatsoever for the accuracy and completeness of the information contained herein.
- We make no warranties which extend beyond the description herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
- No liability can be accepted in respect of the use of the product in conjunction with other materials. The information contained herein relates exclusively to the product when it is not used in conjunction with any third party's materials