Technical Datasheet

Product Name
SCGC™ PP

Product Type
Polypropylene

Product Grade
P303S

Product Description

SCG PP P303S is a homopolymer polypropylene resin which is suitable for sheet and thermoforming products that required high stiffness and high clarity. It is particularly designed for solid phase pressure forming.

Typical Application

- Dairy cups
- Disposable drinking cup
- Food containers

Product Characteristics

- High stiffness
- Microwavable or hot fillable
- High clarity

International Compliance

- U.S. FDA 21 CFR 177.1520
- Commission Regulation (EU) no. 10/2011

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
Melt Flow Rate	ASTM D 1238 @ 230 °C, 2.16 kg	2.3	g/ 10 min
Density	ASTM D 1505	0.91	g/cm3
Melting Point	ASTM D 2117	160	°C
Tensile Strength at Yield	ASTM D 638	400	kg/cm2
Elongation at Yield	ASTM D 638	7	%
Flexural Modulus	ASTM D 790	19,000	kg/cm2
Notched Izod Impact Strength	ASTM D 256 @ 23°C	59	J/m
Heat Deflection Temperature (HDT)	ASTM D 648 @ 4.6 kg/cm2	128	°C
Haze at 1 mm	ASTM D 1003	23	%
%Shrinkage (2 mm) MD	TPE Method	1.38	%
%Shrinkage (2 mm) TD	TPE Method	1.39	%

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 conditions depend on each machine type, product dimensions and environment. Sheet: Melt temperature range is 200-250°C and cooling temperature range is 20-60°C. Thermoforming: Heating temperature depends on machine and line speed. Recommend temperature on sheet before forming should be around 155-158°C.

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.

Safety

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

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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 Safety Datasheet for details on various aspects of safety, recovery and disposal of the products; for more information, contact your SCG Chemicals technical service.

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 service.
- The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.
    - Safety Datasheet
    - 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.

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