



## TECHNICAL DATA SHEET

Product Type

**High Density Polyethylene**

Product Name

**SCG HDPE**

Product Grade

**H377C**

### Product Description

SCG HDPE H377C is a bi-modal high density polyethylene resin for film casting and extrusion lamination to enhance film stiffness. It also provide good compatibility when blended with LDPE & LLDPE or co-extruded with LDPE & LDPE.

### Typical Application

- Blending or co-extrusion with LDPE & LLDPE to improve film stiffness for general flexible packaging product.

### Product Characteristics

- High stiffness
- Easy tearing in MD
- High temperature & High scratch resistance

### 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 @ 190°C, 2.16 kg	7.5	g/10 min
Density	ASTM D 1505	0.961	g/cm <sup>3</sup>
Melting Point	ASTM D 2117	133	°C
Vicat Softening Point	ASTM D 1525	127	°C
<b>Film Properties</b>			
Tensile Strength at Break, MD	ASTM D 882	37	MPa
Tensile Strength at Break, TD	ASTM D 882	28	MPa
Tensile Modulus, 2% Secant, MD	ASTM D 882	706	MPa
Tensile Modulus, 2% Secant, TD	ASTM D 882	855	MPa
Elongation at Break, MD	ASTM D 882	859	%
Elongation at Break, TD	ASTM D 882	3	%
Elmendorf Tear Strength, MD	ASTM D 1922	8	g
Elmendorf Tear Strength, TD	ASTM D 1922	64	g
Haze	ASTM D 1003	9	%



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Film properties obtained from film 25  $\mu\text{m}$  film thickness by SCG internal laboratory casting line with melt temperature 220°C.

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

### Processing Guidelines

SCG HDPE H377C is recommended to blend with general cast/coating PE resin to enhance processability or use 100% with co-extrusion cast/lamination machine. Generally, melt temperature should be around 220-240°C and 310-330°C for casting and extrusion lamination, respectively.

### 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
- 25 kg loose bag
- 25 kg stretch wrap palletized
- 750 kg big bag
- Seabulk container

### Product Packaging

### Storage

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene Company Limited/ Thai Polypropylene 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 sloped.



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### 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 Plastics/SCG Performance Chemicals technical service.

### 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 Plastics/SCG Performance Chemicals technical service.

### Related

- The latest version of this document will be available at our website, [www.scgchemicals.com](http://www.scgchemicals.com), or can be obtained from the SCG Plastics/SCG Performance 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.
  - Material Safety Datasheet
  - Statement on compliance to food contact regulations

### 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.
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