



# Technical Data Sheet

Product Name  
**SCGC™ HDPE**

Product Type  
**High Density Polyethylene for Pipe Application**

Product Grade  
**S1000P**

## Product Description

SCGC HDPE S1000P is a natural, trimodal, high density polyethylene resin designed as a general base resin of color compound for pipe extrusion and stripe.

## Typical Application

- Drainage pipes
- Sewage pipes
- Water pipes
- Corrugated pipes
- Color stripes

## Product Characteristics

- Good process ability
- Outstanding mechanical strength
- Excellent stress crack resistance

## Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate	ASTM D 1238 @190 °C, 5.0 kg	0.19	g/10 min
Melt Flow Rate	ASTM D 1238 @190 °C, 21.6 kg	6.25	g/10 min
Density	ASTM D 1505	0.949	g/cm <sup>3</sup>
Tensile Strength at Yield	ISO 527 @ Crosshead speed 100 mm/min	23	MPa
Tensile Strength at Break	ISO 527 @ Crosshead speed 100 mm/min	> 30	MPa
Elongation at Break	ISO 527 @ Crosshead speed 100 mm/min	> 600	%
Oxidative Induction Time	ISO 11357-6 @ 200 °C	> 40	min
ESCR	ASTM D 1693 @ 10% Igepal Method B	> 10,000	Hrs, FO

**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

For extrusion of SCGC HDPE S1000P, it is recommended to use a screw equipped with suitable mixing screw elements in order to achieve pigment dispersion. For normal extrusion equipment, we suggest a melt temperature range in between 200-220 °C

### Product Technical Assistance

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

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