



# Technical Data Sheet

Product Name  
**SCGC LLDPE**

Product Type  
**Black LLDPE Compound**

Product Grade  
**D682PC**

## Product Description

SCGC LLDPE D682PC is a black linear low density polyethylene compound. Well dispersed carbon black creates outstanding UV resistance and thermal stability.

## Typical Application

- Agricultural pipes
- Drinking water pipes
- Sewerage pipes

## Product Characteristics

- High flexibility
- High ESCR
- Good processing

## Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate	ISO 1133 @190 °C, 2.16 kg	0.24	g/ 10 min
Density (Compound)	ISO 1183	0.946	g/cm <sup>3</sup>
Tensile Strength at Yield	ISO 527 @ Crosshead speed 100 mm/min	17	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	%
Carbon Black Dispersion	ISO 18553	< 3	-
Carbon Black Content	ISO 6964	2.25	% wt
Oxidative Induction Time	ISO 11357 @ 210 °C	≥ 40	min
ESCR	ASTM D1693	> 1000	Hrs, FO
Hydrostatic Pressure	ISO 1167	PE50	-

**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 LLDPE D682PC, it is recommended to use a screw giving good melting and mixing without excessive shear. A single or double flight PE screws have proven satisfactory and will be used with good result. For normal extrusion equipment, we suggest a melt temperature of 200 – 220 °C, and drying 80 – 90 °C for 1 - 2 hours before use.

### 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

- Black 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.

### 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 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 Material 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](http://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.
  - Material Safety Data Sheet
  - Statement on compliance to food contact regulation.

### 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