



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	0.21	g/ 10 min
Density (Compound)	ISO 1183	0.946	g/cm ³
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/cm² 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 services at the address 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.

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