



Technical Data Sheet

Product Name
SCGC™ LLDPE

Product Type
Black LLDPE Compound for Cable Jacketing

Product Grade
L546WC

Product Description

SCGC™ LLDPE L546WC is a black linear low density polyethylene compound for jacketing in communication cable applications. It contains well-dispersed carbon black to provide excellent weathering resistance and UV resistance.

Typical Application

- Jacketing of telecommunication cable
- Jacketing of fiber optic cable
- Jacketing of power cable

Product Characteristics

- Good surface appearance
- Good mechanical properties
- High extrusion speed

International Compliance

- IEC 60502 (ST3, ST7), IEC 60840 (ST3, ST7)*

*Cable jacketed with SCGC LLDPE L546WC using sound commercial extrusion practices and testing procedures, should meet the following cable specification.

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate at 190 °C and 2.16 kg	ASTM D 1238	1.12	g/10 min
Density (Base resin)	ASTM D 1505	0.933	g/cm ³
Density (Compound)	ASTM D 1505	0.943	g/cm ³
Tensile Strength at Break (50 mm/min)	ASTM D 638	29	MPa
Elongation at Break (50 mm/min)	ASTM D 638	> 800	%
Flexural Modulus	ASTM D 790	600	kg/cm ²
Hardness (Shore D)	ASTM D 2240	58	
ESCR @ 50 °C	ASTM D 1693	> 1,000	hrs, F0, 10% Igepal
Carbon black content	ASTM D 4218	2.5	%wt
Oxidative induction time at 200°C	ASTM D 3895	> 90	min

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

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Processing Guidelines

For extrusion of SCGC LLDPE L546WC, it is recommended to use with the screw giving good homogenization without excessive shear. Standard PE screws have proven satisfactorily which provide good result.

SCGC LDPE L546WC is recommended to have proper drying before using in order to acquire good product performance.

Recommended melt temperature is 190-230 °C.

If preheating and/or drying is used, the suitable condition is 80-95 °C for 1-2 hours.

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

- 750 kg big bag

Storage

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene Co., Ltd.
- 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 sloped.

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