



## TECHNICAL DATA SHEET

Product Type

Linear Low Density Polyethylene for Blown Film

Product Name

SCG LLDPE

Product Grade

L2009F

### Product Description

L2009F is a butene Linear resin with Slip and Antiblocking agent. It is recommended for general purpose bag with high productivity and can be blended with HDPE or LDPE to improve tear and seal strength.

### Typical Application

- Heavy duty bag
- Industrial bag
- Agricultural film

### Product Characteristics

- High productivity
- Good optical properties
- Can be blended with HDPE, LDPE
- Food contact applicable
- Slip content 1000 ppm
- Antiblocking content 700 ppm

### International Compliance

- U.S FDA 21 CFR 177.1520
- Regulation (EU) No.10/2011
- Packaging and Packaging waste Directive 94/62/EC/CONEG
- RoHS

### Physical Properties

| Property                   | Test Method                                                          | Typical Value        | Unit                 |
|----------------------------|----------------------------------------------------------------------|----------------------|----------------------|
| Melt Flow Rate             | ASTM D 1238 @ 190 °C, 2.16 kg                                        | 1.00                 | g/10 min             |
| Density                    | ASTM D 1505                                                          | 0.921                | g/cm <sup>3</sup>    |
| Melting Point              | ASTM D 2117                                                          | 122                  | °C                   |
| Vicat Softening Point      | ASTM D 1525                                                          | 102                  | °C                   |
| Brittleness Temperature    | ASTM D 746                                                           | < - 70               | °C                   |
| ESCR                       | ASTM D 1693 @ 50 °C<br>(Condition B, Compression Molded, 25% Igepal) | > 1000               | hrs, F <sub>50</sub> |
| <b>Film Properties</b>     |                                                                      |                      |                      |
| Tensile Strength at Yield  | ASTM D 882                                                           | MD: 120*, TD: 140*   | kg/cm <sup>2</sup>   |
| Tensile Strength at Break  | ASTM D 882                                                           | MD: 380*, TD: 350*   | kg/cm <sup>2</sup>   |
| Tensile Modulus, 2% Secant | ASTM D 882                                                           | MD: 2650*, TD: 2770* | kg/cm <sup>2</sup>   |
| Elongation at Break        | ASTM D 882                                                           | MD: 1000*, TD: 1200* | %                    |
| Elmendorf Tear Strength    | ASTM D 1922                                                          | MD: 145*, TD: 370*   | g                    |
| Dart Impact Strength       | ASTM D 1709                                                          | 130*                 | g                    |
| Haze                       | ASTM D 1003                                                          | 15*                  | %                    |
| Gloss                      | ASTM D 2457                                                          | 53*                  | %                    |

**Note:** (\*) Properties obtained from film produced on a pilot line at TPE, 38 micron, BUR 2:1, MD = Machine Direction, TD = Transverse Direction. Conversion factor for changing unit from kg/cm<sup>2</sup> to MPa is divided by 10.2

SCG Plastics Co., Ltd. / SCG Performance Chemicals Co., Ltd.





## TECHNICAL DATA SHEET

Product Type

**Linear Low Density Polyethylene for Blown Film**

Product Name

**SCG LLDPE**

Product Grade

**L2009F**

### Processing Guidelines

The actual extrusion condition depends on type of using machine, size and film thickness of product required. Generally, melt temperature should be 180-200 °C and BUR 2-3 times of die diameter is recommended.

### 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

### Product Packaging

- 25 kg loose bag
- 25 kg stretch wrap palletized
- 750 kg big bag
- Seabulk 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.

SCG Plastics Co., Ltd. / SCG Performance Chemicals Co., Ltd.

