

# SUPEER™ MLLDPE 8112

## METALLOCENE LINEAR LOW DENSITY POLYETHYLENE

### DESCRIPTION

SUPEER™ Metallocene Linear Low Density Polyethylene (mLLDPE) 8112 is an ethylene-octene copolymer produced via solution polymerization using metallocene catalyst. It performs well in a wide range of general purpose and high performance LLDPE blown film applications and have excellent processability.

### TYPICAL APPLICATIONS

Lamination film, frozen bag, liquid pouch, industrial liner, stretch hood, surface protective film.

### TYPICAL PROPERTY VALUES

| PROPERTIES                              | TYPICAL VALUES | UNITS             | TEST METHODS |
|---|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>               |                |                   |              |
| <b>Melt Flow Rate (MFR)</b>             |                |                   |              |
| at 190°C and 2.16 kg                    | 1.1            | g/10 min          | ASTM D1238   |
| <b>Density</b>                          | 912            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>OPTICAL PROPERTIES</b>               |                |                   |              |
| <b>Haze</b>                             | 7              | %                 | ASTM D1003   |
| <b>FILM PROPERTIES</b>                  |                |                   |              |
| <b>Tensile test film <sup>(1)</sup></b> |                |                   |              |
| stress at break, MD                     | 51             | MPa               | ASTM D882    |
| stress at break, TD                     | 49             | MPa               | ASTM D882    |
| strain at break, MD                     | 660            | %                 | ASTM D882    |
| strain at break, TD                     | 730            | %                 | ASTM D882    |
| stress at yield, MD                     | 11             | MPa               | ASTM D882    |
| stress at yield, TD                     | 10             | MPa               | ASTM D882    |
| 1% secant modulus, MD                   | 127            | MPa               | ASTM D882    |
| 1% secant modulus, TD                   | 142            | MPa               | ASTM D882    |
| <b>Dart Impact F50</b>                  | >1000          | g                 | ASTM D1709   |
| <b>Elmendorf Tear Strength</b>          |                |                   |              |
| MD                                      | 16             | g/μm              | ASTM D1922   |
| TD                                      | 25             | g/μm              | ASTM D1922   |
| <b>THERMAL PROPERTIES</b>               |                |                   |              |
| <b>Melting Point</b>                    | ~111           | °C                | SABIC method |

(1) Properties have been measured by producing 50 μm film with 2.5 BUR using 100% SUPEER™ 8112.

### PROCESSING CONDITIONS

Typical processing conditions for SUPEER™ 8112 are:  
Barrel temperature: 180 - 200°C, Blow up ratio: 2.0 – 3.0