

# LUCENE<sup>TM</sup> LC180

## Polyolefin Elastomer for Polymer Modification

**Applications**

- General purpose thermoplastic elastomers, Polymer modification
- Shoe sole, Wire & Cable

**Performance**

- Improved impact strength and toughness
- Outstanding clarity and high filler acceptance
- Excellent compression set and tear strength

| Resin Properties                           | Test methods | Units             | Values <sup>(1)</sup> |
|--------------------------------------------|--------------|-------------------|-----------------------|
| Melt Index, 2.16kg/190℃                    | ASTM D 1238  | g/10min           | 1.2                   |
| Density @ 23℃                              | ASTM D 1505  | g/cm <sup>3</sup> | 0.885                 |
| Mooney viscosity, ML <sub>1+4</sub> @ 121℃ | ASTM D 1646  | ℃                 | 20                    |

| Physical Properties      | Test methods              | Units | Values <sup>(2)</sup> |
|--------------------------|---------------------------|-------|-----------------------|
| Tensile Strength @ Break | ASTM D 638 <sup>(3)</sup> | MPa   | 28                    |
| Elongation @ Break       | ASTM D 638 <sup>(3)</sup> | %     | >800                  |
| Flexural Modulus, 1%     | ASTM D 790                | Mpa   | 30                    |
| Hardness, Shore A        | ASTM D 2240               | -     | 86                    |
| Tear Strength, Type C    | ASTM D 624                | kN/m  | 58                    |

| Thermal Properties           | Test methods | Units | Values |
|------------------------------|--------------|-------|--------|
| Melting Point, DSC           | LG Method    | ℃     | 73     |
| Glass Transition Temperature | LG Method    | ℃     | -45    |

(1) The properties data in this table are typical values, and not guaranteed specification.

(2) Typical resin property values are measured on a standard compression molded specimens

(3) Speed of 508 mm/min.

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## Description

**LC180 is an ethylene-1-octene copolymer produced using LG Chem's metallocene polymerization catalyst and solution process technology.**

**This resin is an excellent impact modifier for plastics and offers excellent performance in shoe sole application.**

**\* Notice**

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