

# LUCENE<sup>TM</sup> LC170

Polyolefin Elastomer

## **Applications**

- General purpose thermoplastic elastomer for polymer modification
- Automotive interior/exterior, Shoe sole, Wire & Cable

# **Description**

- LUCENE<sup>™</sup> LC170 is an ethylene-1-octene copolymer produced using LG Chem's metallocene polymerization catalyst and solution process technology.
- LUCENE<sup>TM</sup> LC170 is an excellent impact modifier for plastics and offers unique performance capabilities for compounded products.

## **Typical properties**

| Characteristics              | Test Method              | Unit          | Value |
|------------------------------|--------------------------|---------------|-------|
| Physical <sup>(1)</sup>      | <u>:</u>                 | <u>:</u>      |       |
| Density                      | ASTM D1505               | g/m³          | 0.870 |
| MFR(190°C,2.16kg)            | ASTM D1238               | g/10min       | 1.1   |
| Mooney Viscosity(ML1+4@121℃) | ASTM D1646               | MU            | 23    |
| Mechanical <sup>(2)</sup>    |                          |               |       |
| Tensile Strength at Break    | ASTM D638 <sup>(3)</sup> | Мра           | 9.5   |
| Elongation at Break          | ASTM D638 <sup>(3)</sup> | %             | >900  |
| Tear Strength                | ASTM D624                | kN/m          | 40    |
| FlexuralModulus1% Secant     | ASTM D790                | Мра           | 14    |
| Hardness                     |                          |               |       |
| Shore hardness(Shore A)      | ASTM D2240               | -             | 71    |
| Thermal                      |                          |               |       |
| Melting Temperature          | LG                       | $^{\circ}$    | 58    |
| Glass Transition Temperature | LG                       | ${\mathbb C}$ | -53   |

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

# **Processing information**

LUCENE<sup>™</sup> LC170 may be processed on conventional equipment. It is recommended that
hopper feed throat should be cooled below 30°C to prevent from pellet bridging with low
melting point.

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For additional sales, order and technical assistance

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Head office PO Division, LG Chem Ltd.

Yeoui-do P.O.Box 672, 21st floor LG Twin Tower, Yeoui-daero 128, Yeongdeungpo-gu Seoul, Korea. Tel. 82-2-3773-3028 PO TECH Center. PO TS Team 188, Munji-ro, Yuseong-gu, Daejeon, 34122, Korea.

Tel. 82-42-722-5078

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<sup>(2)</sup> Typical resin property values are measured on a standard compression molded specimens

<sup>(3)</sup> Speed of 500 mm/min.



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## Storage and handling Recommendations

LUCENE™ LC170 is available in free-flowing pelletized form designed for use in conventional polymer fabrication systems. The proper storage and handling of these product is extremely important for the products to remain flowable for transport and processing without pellet blocking.

#### To prevent pellet blocking

- To minimize static load, do not double stack pallets.
- Keeping storage and handling temperature between 10 ~ 25°C.
- Store the resins in the warehouse to protect from exposure to elevated temperature which is not to exceed 35°C.
- Consume the resins on a first in, first out basis.

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