

# Solumer™ 871L

## Polyolefin Elastomer

### Introduction

Solumer™ 871L is an **ethylene-octene copolymer** produced via Nexlene™ technology. It performs well in a wide range of general purpose thermoplastic elastomer applications and has excellent flow characteristics

### Applications

- General purpose thermoplastic elastomers
- Wire and cable
- Impact modification
- Footwear

### Properties

|                                          |                                   | Typical Values | Unit                | Test Method            |
|------------------------------------------|-----------------------------------|----------------|---------------------|------------------------|
| <b>Physical Properties</b>               | Density                           | 0.868          | g/cm <sup>3</sup>   | ASTM D792              |
|                                          | Melt index (2.16 kg @190°C)       | 1.0            | g/10min             | ASTM D1238             |
|                                          | Mooney viscosity (ML1+4 @ 121°C)  | 21             | MU                  | ASTM D1646             |
| <b>Mechanical Properties<sup>1</sup></b> | Tensile strength at break         | 95             | kgf/cm <sup>2</sup> | ASTM D638 <sup>2</sup> |
|                                          | Elongation at break               | 850            | %                   | ASTM D638 <sup>2</sup> |
|                                          | Tensile modulus (100% Elongation) | 30             | kgf/cm <sup>2</sup> | ASTM D638 <sup>2</sup> |
|                                          | Flexural modulus (1% secant)      | 140            | kgf/cm <sup>2</sup> | ASTM D790              |
|                                          | Tear strength (Type C)            | 41             | kgf/cm <sup>2</sup> | ASTM D624              |
|                                          | Hardness                          |                |                     | Hardness               |
|                                          | Shore A (1 sec)                   | 72             |                     |                        |
|                                          | Shore D (1 sec)                   | 21             |                     | ASTM D2240             |
| <b>Thermal Properties</b>                | Melting temperature               | 62             | °C                  | SK Method              |
|                                          | Glass transition temperature      | -52            | °C                  | SK Method              |

<sup>1</sup> Evaluated using compression molded sample, process condition: 170 °C, 4 min

<sup>2</sup> Crosshead speed: 500 mm/min.

#### Notes

These are *typical values* and are *not to be construed as specifications*. The physical properties are highly dependent on the manufacturing conditions. So customers should confirm performances by their own tests.

#### For additional sales, order and technical assistance

**Head office** SK geo centric Co.,LTD  
51 Jong-ro, Jongno-gu,  
Seoul, Republic of Korea  
TEL +82-2-2121-7067

**TS&D** SK innovation Institute of Environmental Science & Technology,  
325 Exporo, Yueseong-gu,  
Daejeon, KOREA  
TEL +82-42-609-8871