

# Smart™ 181

Smart™ 181, metallocene LLDPE, is an ethylene-octene copolymer produced via Nexlene™ Technology from SK. It performs well in a wide range of general purpose of LLDPE blown film applications, and has excellent melt flow characteristics.

Applications: Low-temperature Seal Packaging, Lamination Film, Food and Non-Food Packaging, etc.

Additives		Antiblock: No	Slip: No		
		Typical Values		Unit	Test Method
<b>Resin</b>	<b>Co-monomer</b>	<b>Octene-1</b>			SK Method
<b>Properties</b>	<b>Density</b>	<b>0.918</b>		g/cm <sup>3</sup>	ASTM D1505
	<b>MI</b>	<b>1.0</b>		g/10min	ASTM D1238
	<b>Melting Point</b>	<b>~ 115</b>		°C	SK Method
<b>Film Properties*</b>	<b>Dart Drop Impact</b>		1000	g	ASTM D1709
	<b>Haze</b>		10	%	ASTM D1003
	<b>Lowest Heat-seal Temp.</b>		110	°C	SK Method
	<b>Initial Tear Strength</b>	MD	115	kg/cm	ASTM D1004
		TD	120	kg/cm	ASTM D1004
	<b>Elmendorf Tear Strength</b>	MD	14	g/um	ASTM D1922
		TD	22	g/um	ASTM D1922
	<b>Tensile Strength at Break</b>	MD	550	kg/cm <sup>2</sup>	ASTM D882
		TD	550	kg/cm <sup>2</sup>	ASTM D882
	<b>Elongation at Break</b>	MD	630	%	ASTM D882
		TD	730	%	ASTM D882
	<b>Tensile Strength at Yield</b>	MD	120	kg/cm <sup>2</sup>	ASTM D882
		TD	115	kg/cm <sup>2</sup>	ASTM D882
	<b>Secant Modulus (1%)</b>	MD	1430	kg/cm <sup>2</sup>	ASTM D882
		TD	1590	kg/cm <sup>2</sup>	ASTM D882

#### Conditions for blown film production

- Machine: Macci blown film line with 50Ø screw
- Film specification: 50um x 600mm

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.