

Date Prepared: 20th, May 2014



Smart™ 181S

Smart™ 181S, 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: Yes Slip: Yes

		Typical Values	Unit	Test Method	
Resin properties	Co-monomer	Octene-1		SK Method	
	Density	0.918	g/cm ³	ASTM D1505	
	MI	1.0	g/10min	ASTM D1238	
	Melting point	~ 115	°C	SK Method	
Film Properties*	Dart drop impact	800	g	ASTM D1709	
	Haze	12	%	ASTM D1003	
	Gloss (at 45°)	55		ASTM D2457	
	Lowest heat-seal Temp.	110	°C	SK Method	
	Initial tear strength	MD	115	kg/cm	ASTM D1004
		TD	120	kg/cm	ASTM D1004
	Elmendorf tear strength	MD	14	g/um	ASTM D1922
		TD	22	g/um	ASTM D1922
	Tensile strength at break	MD	550	kg/cm ²	ASTM D882
		TD	550	kg/cm ²	ASTM D882
	Elongation at break	MD	630	%	ASTM D882
		TD	730	%	ASTM D882
	Tensile strength at yield	MD	120	kg/cm ²	ASTM D882
		TD	115	kg/cm ²	ASTM D882
	Secant modulus (1%)	MD	1430	kg/cm ²	ASTM D882
TD		1590	kg/cm ²	ASTM D882	

* Typical values, not to be used as specifications.

Conditions for blown film production

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