

# Smart™ 153

## Introduction

Smart™ 153, metallocene LLDPE, is an **ethylene-octene copolymer** produced via Nexlene™ technology. Smart™ 153 performs well in a wide range of general purpose LLDPE cast film applications.

Typical Performance:

- Excellent impact strength and transparency
- Superior processability and neck-in phenomenon

Compiles with:

- US. FDA 21 CFR 177.1520
- EU. No 10/2011

Additives:

- Antiblock: No
- Slip: No

## Properties

		Typical Values	Unit	Test Method	
<b>Resin Properties</b>	Density	0.915	g/cm <sup>3</sup>	ASTM D792	
	Melt index (2.16 kg @190°C)	3.0	g/10min	ASTM D1238	
	Melting temperature	113	°C	SK Method	
	Vicat softening temperature	101	°C	ASTM D1525	
<b>Film Properties</b>	Film thickness - tested	25	µm	ASTM D374	
	Dart impact strength	450	g	ASTM D1709A	
	Haze	1.3	%	ASTM D1003	
	Seal initiation temperature	102	°C	SK Method <sup>1</sup>	
	Elmendorf tear strength	MD	10	g/µm	ASTM D1922
		TD	21	g/µm	ASTM D1922
	Tensile strength at break	MD	510	kg/cm <sup>2</sup>	ASTM D882
TD		400	kg/cm <sup>2</sup>	ASTM D882	

*Technical Information*

Elongation at break	MD	410	%	ASTM D882
	TD	640	%	ASTM D882
Secant modulus (1%)	MD	1050	kg/cm <sup>2</sup>	ASTM D882
	TD	1140	kg/cm <sup>2</sup>	ASTM D882

<b>Extrusion Condition</b>	<ul style="list-style-type: none"> <li>Screw size: 30 mm</li> <li>Screw speed: 30 rpm</li> <li>Die gap: 1 mm</li> <li>Melt temperature: 230°C</li> </ul>
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<sup>1</sup> Temperature at which 0.4 kg/25.4 mm heat seal strength is achieved

**Notes**

These are **typical values** and are **not 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 Global Chemical Co.,LTD  
26 Jong-ro, Jongno-gu,  
Seoul, Korea  
TEL +82-2-2121-5052

**TS&D** SK innovation Global Technology  
325 Exporo, Yueseong-gu,  
Daejeon, Korea  
TEL +82-42-609-8623