

Technical Information

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
Resin Properties	Density	0.915	g/cm ³	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
Film Properties	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 ¹
	Elmendorf tear strength	MD 10	g/µm	ASTM D1922
		TD 21	g/µm	ASTM D1922
	Tensile strength at break	MD 510	kg/cm ²	ASTM D882
		TD 400	kg/cm ²	ASTM D882

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

Extrusion Condition	•	Screw size: 30 mm
	•	Screw speed: 30 rpm
	•	Die gap: 1 mm
	•	Melt temperature: 230°C

¹ 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

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