

Technical Information

Supreme™ 004

Polyolefin Plastomer

Introduction

Supreme™ 004, Polyolefin Plastomer (POP), is an **ethylene-octene copolymer** produced via Nexlene™ technology. Supreme™ 004 performs well in a wide range of various cast film applications with excellent sealing property, cling force, and impact strength.

Typical Performance:

- Superior low seal initiation temperature and hot tack strength
- Excellent impact strength, transparency, and cling force

Additives:

- Antiblock : No
- Slip : No

Properties

		Nominal Value (English)	Nominal Value (SI)	Test Method	
Resin Properties	Density	0.900 g/cm ³	0.900 g/cm ³	ASTM D792	
	Melt index (2.16 kg @190°C)	3.5 g/10min	3.5 g/10min	ASTM D1238	
	Melting temperature	204.8 °F	96 °C	SK Method	
	Vicat softening temperature	177.8 °F	81 °C	ASTM D1525	
Film Properties	Film thickness – tested	40 µm	40 µm	ASTM D374	
	Dart impact strength	> 1000 g	> 1000 g	ASTM D1709A	
	Haze	0.5 %	0.5 %	ASTM D1003	
	Seal initiation temperature	179.6 °F	82 °C	SK Method ¹	
	Elmendorf tear strength	MD	15 g/µm	15 g/µm	ASTM D1922
		TD	20 g/µm	20 g/µm	ASTM D1922

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Tensile strength at break	MD	7250 psi	50.0 MPa	ASTM D882
	TD	6970 psi	48.1 MPa	ASTM D882
Elongation at break	MD	490 %	490 %	ASTM D882
	TD	700 %	700 %	ASTM D882
Secant modulus (1%)	MD	8530 psi	58.8 MPa	ASTM D882
	TD	9960 psi	68.6 MPa	ASTM D882

- Extrusion Condition**
- Screw size: 40 mm
 - Screw speed: 30 rpm
 - Die gap: 1 mm
 - Melt temperature: 210~230°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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