

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

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 +82-42-609-8488