

Technical Information

Supreme™ 021S

Polyolefin Plastomer

Introduction

Supreme™ 021S, Polyolefin Plastomer (POP), is an **ethylene-octene copolymer** produced via Nexlene™ technology. Supreme™ 021S performs well in a wide range of various food & non-food packaging films with excellent sealing property and impact strength.

Typical Performance:

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

Compiles with:

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

Additives:

- Antiblock: 4000 ppm
- Slip: 1300 ppm

Properties

		Typical Values	Unit	Test Method
Resin Properties	Density	0.905	g/cm ³	ASTM D792
	Melt index (2.16 kg @190°C)	1.0	g/10min	ASTM D1238
	Melting temperature	100	°C	SK Method
	Vicat softening temperature	87	°C	ASTM D1525
Film Properties	Film thickness - tested	40	µm	ASTM D374
	Dart impact strength	>1000	g	ASTM D1709A
	Haze	5	%	ASTM D1003
	Seal initiation temperature	84	°C	SK Method ¹
	Elmendorf tear strength	MD 10	g/µm	ASTM D1922
		TD 17	g/µm	ASTM D1922
	Tensile strength at break	MD 480	kg/cm ²	ASTM D882
		TD 530	kg/cm ²	ASTM D882

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Elongation at break	MD	530	%	ASTM D882
	TD	610	%	ASTM D882
Secant modulus (1%)	MD	580	kg/cm ²	ASTM D882
	TD	640	kg/cm ²	ASTM D882

Extrusion Condition	•	Screw size: 35 mm
	•	Die diameter: 100 mm
	•	Die gap: 1 mm
	•	Blow-up ratio: 2.1
	•	Melt temperature: 160-180 °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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