



Technical Data Sheet

DOW™ LDPE 525E REN Low Density Polyethylene Resin

Overview

DOW™ LDPE 525E REN Low Density Polyethylene Resin can be readily extruded using conventional blown film techniques utilizing melt temperatures between 160 and 195°C. This resin, when properly fabricated, shows excellent mechanical properties, consistent with its higher density (high stiffness) when compared to standard resins, whilst maintaining very high clarity and gloss. It shows good draw down properties and processability. This product does not contain slip nor anti-block additives.

Sustainability Attribute:



Applications:

- High clarity lamination films
- Label films
- Packaging of soft products such as hand tissues, toilet tissues, feminine hygiene products
- High clarity tissues overwrap film
- Produce bags
- Food packaging films

Complies with:

- U.S. FDA 21 CFR 177.1520 (c)2.2
- EU, No 10/2011
- U.S. FDA-DMF
- ISCC PLUS certification for bio-circular plastics

Physical Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density	0.930	g/cm ³	0.930	g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	3.2	g/10 min	3.2	g/10 min	ISO 1133
Films					
Film Thickness — Tested	2.0	mil	50	µm	

1. ASTM: American Society for Testing and Materials
ISO: International Standardization Organization

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.



Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Tensile Modulus					ISO 527-3
2% Secant, MD: 2.0 mil (50 µm)	42100	psi	290	MPa	
2% Secant, TD: 2.0 mil (50 µm)	36300	psi	250	MPa	
Tensile Stress					ISO 527-3
MD: Yield, 2.0 mil (50 µm)	2180	psi	15.0	MPa	
TD: Yield, 2.0 mil (50 µm)	2030	psi	14.0	MPa	
MD: Break, 2.0 mil (50 µm)	2760	psi	19.0	MPa	
TD: Break, 2.0 mil (50 µm)	2100	psi	14.5	MPa	
Tensile Elongation					ISO 527-3
MD: Break, 2.0 mil (50 µm)	440	%	440	%	
TD: Break, 2.0 mil (50 µm)	530	%	530	%	
Dart Drop Impact (2.0 mil (50 µm))	85	g	85	g	ISO 7765-1/A
Elmendorf Tear Strength					ASTM D1922
MD: 2.0 mil (50 µm)	240	g	240	g	
TD: 2.0 mil (50 µm)	180	g	180	g	
Extrusion					
Melt Temperature	320 to 383	°F	160 to 195	°C	
Extrusion Notes					
Blow up ratio 1:2.5					

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Medical Applications Policy (Cont.)

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