



Exelene® LLDPE

Product Data Sheet

Linear Low-Density Polyethylene znLLDPE-butene¹ Blow Film Extrusion

1401

Melt Flow Rate 0,95

Density 0,919

Applications

- 0,5 – 1,0 kg bags for packing powdered foods and grains such as rice, pulses, salt, sugar and flour
- Bags for packing solid foods such as bread, tarts, vegetables and fruits
- Bags for packing personal and domestic products such as gloves, silverwear, drinking glasses and napkins

Characteristics

- The Exelene resin LLDPE 1401 meets the requirements of section 177.1520, paragraph C, from chapter 21 denominated "Olefin Polymers" from the Code of Federal Regulations of the FDA, to be utilized with direct food contact.

Properties	ASTM Testing	Units	Values	
Resin Properties				
Melt Flow Rate	MFI ₂ D 1238 (190°C; 2,16 kgf)	g/10 min	0.95	
Density	D 792 (23°C)	g/cm ³	0.919	
Melting Point	DSC	°C	121	
Additives Package	Antioxidant, Slip Agent, Antiblock Agent			
Blow Film Properties with thickness of 1,0 mils = 25,4 µm y BUR = 2,5				
Tensile Strength @ yield ⁽²⁾	MD	D 882A (20 in/min)	psi	1,360
	TD		psi	1,380
Tensile Strength @ break	MD	D 882A (20 in/min)	psi	4,600
	TD		psi	3,500
Elongation @ break	MD	D 882A (20 in/min)	%	540
	TD		%	800
Flexural Strength	MD	D 882A (0,2 in/min; 1%)	psi	28,000
	TD		psi	32,300
Elmendorf Tear Propagation	MD	D 1922 (1.600 gf)	gf	110
	TD		gf	650
Impact Resistance by the Free Falling Dart Method	D 1709A (F50; 38 mm; 66 cm)	gf	75	
Opacity	D 1003	%	22	

(1) znLLDPE-butene – Lineal Low Density Polyethylene polymerized from comonomer 1-butene In presence of Ziegler-Natta catalysts

(2) MD = Machine Direction and TD =Transversal Direction