

### Linear Low-Density Polyethylene znLLDPE-butene<sup>1</sup> Blown Film Extrusion

# 1401

Melt Flow Rate 1

Density 0.922

#### 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	
<b>Resin Properties</b>				
Melt Flow Rate	MFI <sub>2</sub> D 1238 (190°C; 2,16 kgf)	g/10 min	1	
Density	D 792 (23°C)	g/cm <sup>3</sup>	0.922	
Melting Point	DSC	°C	121	
Additives	Slip & Antiblock			
<b>Blow Film Properties with thickness of 1,0 mils = 25,4 µm y BUR = 2,5</b>				
Tensile Strength @ yield <sup>(2)</sup>	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	90	
Opacity	D 1003	%	11	

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

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

#### Reach

- Polyethylene are exempted from registration under REACH. However, the corresponding monomers (used as raw materials for polymer production) and relevant additives have been registered. Please see related Declaration of Compliance for Plastic Food Contact Materials (DoC for PFCM).