



Exelene[®] HDPE

Product Data Sheet

High Density Polyethylene HMW-HDPE¹ with MWD² Wide Bimodal Extrusion Blow Film

7000

Melt Flow Rate **0,07**

Density **0,950**

Applications

- Rectangular and T-Shirt bags with side labels for supermarkets and stores, pre-cut bag rolls for fruits and vegetables, and liners for boxes and cans.

Characteristics

- The Exelene resin HDPE 7000 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	0.07
	HLMFI D 1238 (190°C; 21,6 kgf)	g/10 min	8.50
Density	D 792 (23°C)	g/cm ³	0.949
Melting Point	DSC	°C	131
Blow Film Properties with Thickness of 0,5 mils = 13 µm y BUR = 4,0			
Tensile Strength @ yield ⁽³⁾	MD D 882A (20 in/min)	psi	4,300
	TD	psi	3,900
Tensile Strength @ break	MD D 882A (20 in/min)	psi	9,000
	TD	psi	4,100
Elongation @ break	MD D 882A (20 in/min)	%	300
	TD	%	410
Tensile Modulus of Elasticity	MD D 882A (0,2 in/min; 2%)	psi	115,000
	TD	psi	140,000
Elmendorf Tear Propagation	MD D 1922 (1.600 gf)	gf	14
	TD	gf	25
Impact Resistance by the Free Falling Dart Method	D 1709A (F50; 38 mm; 66 cm)	gf	210

(1) HMW-HDPE : High Density Polyethylene with High Molecular Mass (MFI₂ < 0,23 g/10 min)

(2) MWD : Distribution of molecular mass

(3) MD = Machine Direction y TD =Transversal Direction