



Exelene® LLDPE

Product Data Sheet

Linear Low-Density Polyethylene

LLDPE-butene

Injection Molding

50400

Melt Flow Rate **50**

Density **0.925**

Applications

- Trash cans and office paper bins, Christmas Trees
- Ice trays, Ice Cream cup lids and Twist off bottle caps with security seals.
- Compound Extrusion (Additive and Color Concentrates)

Characteristics

- The Exelene resin LLDPE 50400 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	MF ₁₂ D 1238 (190°C; 2,16 kgf)	g/10 min	50
Density	D 792 (23°C)	g/cm ³	0.925
Melting Point	DSC	°C	123
Additives Package			
Properties in standard test tubes by injection molding			
Tensile Strength @ yield	D 638 (50 mm/min, IV)	psi	1,630
Elongation @ break	D 638 (50 mm/min, IV)	%	90
Flexural Modulus (1%)	D 790 I/B (13 mm/min; 3,2 mm)	psi	38,700
Tensile Impact Strength	D 1822 (S, 23°C)	ft x lb / in ²	90
Durometer Hardness (Shore D)	D 2240 D (23°C; 1 s)	---	52
Brittleness Temperature	D 746A (F50; 25 lbf/in)	°C	< -76
Vicat Softening Point	D 1525A (50°C/h; 1,0 kgf)	°C	91.8
Deflection Temperature Under Load	D 648 (2°C/min; 66 psi)	°C	50
ESCR	Condition B ⁽¹⁾ D 1693B (F50; 1,9 mm)	h	5

(1) Condition B : Grooved specimen with thickness of 1,905 mm = 0,075 in in 100 % Igepal CO-630 a 50°C

