



Exelene[®] HDPE

Product Data Sheet

High Density Polyethylene
HDPE copolymer with MWD1 Thin
Injection Molding

20000

Melt Flow Rate 20

Density 0.953

Applications

- Twist off lids with security seals
- Trash cans and industrial garbage cans

Characteristics

- The Exelene resin HDPE 20000 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	D 1238 (190°C; 2,16 kgf)	g/10 min	20.0
Density	D 792 (23°C)	g/cm ³	0.953
Melting Point	DSC	°C	129
Properties in standard test tubes by compression molding			
Tensile Strength @ yield	D 638 (50 mm/min, IV)	psi	3,900
Elongation @ break	D 638 (50 mm/min, IV)	%	300
Tangential Modulus of Elasticity	D 790 I/B (13 mm/min; 3,2 mm)	psi	185,000
Notched Izod Impact	D 256A (muesca; 3,2 mm)	ft x lb / in	0.32
Tensile Impact Strength	D 1822 (S)	ft x lb / in ²	90
Durometer hardness (Shore D)	D 2240 D (23°C; 1 s)	----	65
Brittleness Temperature	D 746A (F50; 25 lbf/in)	°C	< -75
Vicat Softening Point	D 1525A (50°C/h; 1,0 kgf)	°C	123
Deflection Temperature Under Load	D 648 (2°C/min; 66 psi)	°C	76
ESCR	Condition B ⁽¹⁾ D 1693B (F50; 1,9 mm)	h	< 2

(1) MWD - Distribution of molecular mass

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