



Exelene[®] HDPE

Product Data Sheet

High Density Polyethylene HDPE copolymer with MWD¹ Thin Injection Molding

4000

Melt Flow Rate **4.5**

Density **0.952**

Applications

- Large pans, buckets and 5 gallon barrels for paint and other aggressive chemicals
- Industrial lids for big cans

Characteristics

- The Exelene resin HDPE 4000 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	4
Density	D 792 (23°C)	g/cm ³	0.952
Melting Point	DSC	°C	131
Properties in standard test tubes by compression molding			
Flexural Modulus (Tangent Method)	D 790A	psi / MPa	188,600/ 1300
Tensile Strength @ yield	D 638 (50 mm/min, IV)	psi	3,800
Elongation @ break	D 638 (50 mm/min, IV)	%	1,000
Tangential Modulus of Elasticity	D 790 I/B (13 mm/min; 3,2 mm)	psi	140,000
Notched Izod Impact	D 256A (muesca; 3,2 mm)	ft x lb / in	1.4
Durometer hardness (Shore D)	D 2240 D (23°C; 1 s)	----	68
Brittleness Temperature	D 746A (F50; 25 lbF/in)	°C	< -70
ESCR	Condition B ⁽²⁾ D 1693B (F50; 1,9 mm)	h	16

(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

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