



Exelene® HDPE

Product Data Sheet

8000

Melt Flow Rate 8

Density 0.961

High Density Polyethylene
HDPE homopolymer
Injection Molding

Applications

- Plastic beer, soda or juice boxes
- Fruit and vegetable baskets

Characteristics

- The Exelene resin HDPE 8000 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.

Grade	Additives Package
Exelene HDPE 8000	
Exelene HDPE 8000UV	UV stabilizer

Properties	ASTM Testing	Units	Values
Resin Properties			
Melt Flow Rate	D 1238 (190°C; 2.16 kgf)	g/10 min	8
Density	D 792 (23°C)	g/cm ³	0.961
Melting Point	DSC	°C	133
Properties in standard test tubes by compression molding			
Tensile Strength @ yield	D 638 (50 mm/min, IV)	psi	4,500
Elongation @ break	D 638 (50 mm/min, IV)	%	> 600
Tangential Modulus of Elasticity	D 790 I/B (13 mm/min; 3.2 mm)	psi	175,000
Notched Izod Impact	D 256A (muesca; 3.2 mm)	ft x lb / in	1.1
Tensile Impact Strength	D 1822 (S)	ft x lb / in ²	80
Durometer hardness (Shore D)	D 2240 D (23°C; 1 s)	---	70
Brittleness Temperature	D 746A (F50; 25 lb/in)	°C	< -75
Vicat Softening Point	D 1525A (50°C/h; 1.0 kgf)	°C	128
Deflection Temperature Under Load	D 648 (2°C/min; 66 psi)	°C	87
ESCR	Condition B ⁽¹⁾ D 1693B (F50; 1.9 mm)	h	3

(1) Condition B: Slotted specimen with a thickness of 1.905 mm = 0.075 in in 100% Igepal CO-630 at 50°C

