

SABIC® LDPE HP7022

LOW DENSITY POLYETHYLENE FOR INJECTION MOLDING

DESCRIPTION

HP7022 is a free additive low density polyethylene offering a unique combination of consistent processability, flexibility and toughness. Articles manufactured from HP7022 exhibits excellent impact strength, low shrinkage and good gloss.

TYPICAL APPLICATIONS

HP7022 is intended for producing flexible injection molded articles. It is particularly suited for closures, caps, lids, housewares articles, toys and as base resin for Masterbatch.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16kg	7.0	g/10 min	ASTM D1238
Density			
at 23°C	922	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile Properties			
stress at break	11	MPa	ASTM D638
stress at yield	10	MPa	ASTM D638
elongation at break	188	%	ASTM D638
1% secant modulus	170	MPa	ASTM D638
Izod Impact Strength			
at 23°C	475	J/m	ASTM D256
Hardness (Shore D)	50	-	ASTM D2240
OPTICAL PROPERTIES ⁽¹⁾			
Haze	7	%	ASTM D1003
Gloss			
at 45°	75	-	ASTM D2457
THERMAL PROPERTIES			
Vicat Softening Point	86	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

(1) Based on molded specimens.

PROCESSING CONDITIONS

Typical molding conditions for HP7022 are:

Barrel temperature: 180 - 210°C

Mold temperature: 20 - 40°C