

SABIC® LDPE HP7023

LOW DENSITY POLYETHYLENE FOR INJECTION MOLDING

DESCRIPTION

HP7023 is a Low Density Polyethylene grade that offers a unique combination of consistent processability, flexibility and toughness. Articles manufactured from HP7023 exhibits excellent impact strength, low shrinkage and good gloss.

TYPICAL APPLICATIONS

HP7023 is intended for producing flexible injection molded articles. It is particularly suitable for closures, caps, lids, housewares articles, toys and as base resin for Masterbatch.

TYPICAL PROPERTY VALUES

Revision 20211207

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
@ 190°C & 2.16 kg load ⁽¹⁾	7.0	g/10 min	ASTM D1238
Density at 23°C	923	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile Strength at Break ⁽²⁾	10.5	MPa	ASTM D638
Tensile Elongation at Break	80	%	ASTM D638
Tensile Strength at Yield	9.0	MPa	ASTM D638
1% Secant Modulus	180	MPa	ASTM D638
Izod Impact @ 23°C	490	J/m	ASTM D256
Hardness (Shore D)	43	-	ASTM D2240
OPTICAL PROPERTIES			
Gloss @ 45°	45	-	ASTM D2457
THERMAL PROPERTIES			
Vicat Softening Point	89	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

(1) Typical values; not to be construed as specification limits.

(2) Based on molded specimens.

PROCESSING CONDITIONS

Typical molding conditions for HP7023 are:

Barrel temperature: 180 - 220°C, Mold temperature: 20 - 40°C

STORAGE AND HANDLING

Polyethylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

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CHEMISTRY THAT MATTERS™



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