CERTENE™ HI-4052

High Density Polyethylene

Muehlstein

Message:

HI-4052 is a certified prime copolymer specially designed for molding thin wall applications requiring good balance of properties. HI-4052 features high flow, fast cycling, easy processability, good impact strength, high gloss surfaces, good dimensional stability and good stiffness. HI-4052 applications include multicavity thin-walled containers, frozen food containers, deep drawn housewares, over-caps, and bottle base cups. HI-4052 recommended processing temperature is 210 to 230°C. with mold @ 20 to 40°C.

General Information	
Features	Good dimensional stability
	Rigid, good
	Highlight
	High density
	Copolymer
	Impact resistance, good
	Workability, good
	Fast molding cycle
	High liquidity
	Excellent appearance
Uses	Thin wall container
	Cup
	Shield
	Household goods
	Bottle
	Food container
Forms	Particle
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Density	0.952	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	40	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (50°C, 100% Igepal, Compression Molded, F50)	0.900	hr	ASTM D1693

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength [1] (Yield, Compression Molded)	27.6	MPa	ASTM D638
Tensile Elongation [2] (Break, Compression Molded)	45	%	ASTM D638

Flexural Modulus - 1% Secant [3] (Compression Molded)	1140	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Tensile Impact Strength (Compression Molded)	31.5	kJ/m^2	ASTM D1822
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (0.45 MPa, Unannealed)	73.0	°C	ASTM D648
Brittleness Temperature	-70.0	°C	ASTM D746
Vicat Softening Temperature	123	°C	ASTM D1525

Additional Information
This Specimen was compression molded and was tested according to ASTM D1928 Procedure C.

Injection	Nominal Value	Unit
Processing (Melt) Temp	210 - 230	°C
Mold Temperature	20.0 - 40.0	°C

NOTE	
1.	50 mm/min
2.	50 mm/min
3.	1.3 mm/min

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

WECHAT