

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/cm ³	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		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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

