



CERTENE™ HI-1752

Channel Prime Alliance - High Density Polyethylene

Sunday, November 17, 2019

General Information

Product Description

HI-1752 is a certified prime copolymer that features easy processability, good impact strength, good resistance to low temperature, glossy surfaces, and good dimensional stability. HI-1752 typical applications include housewares, toys, and other general purpose molded applications. HI-1752 complies with U.S. FDA 21 CFR 177.1520 © 3.2a regulation.

General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Copolymer • Good Dimensional Stability • Good Impact Resistance	• Good Processability • High Density • High Gloss	• Low Temperature Impact Resistance
Uses	• General Purpose	• Household Goods	• Toys
Agency Ratings	• FDA 21 CFR 177.1520(c) 3.2a		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.952	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	17	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 50°C, 100% Igepal, F50	2.80	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	22.1	MPa	ASTM D638
Tensile Elongation ² (Break)	280	%	ASTM D638
Flexural Modulus - 2% Secant	814	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength	273	kJ/m ²	ASTM D1822
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-105	°C	ASTM D746
Vicat Softening Temperature	254	°C	ASTM D1525

Additional Information

Test specimens from compression molded plaque according to ASTM D 1928 Procedure C.

Notes

¹ Typical properties: these are not to be construed as specifications.

² 50 mm/min