

HDPE (High Density Polyethylene)

HDPE is a high impact resistant material suitable for tabletops, shelves, walls and space dividers.

Part numbers

ST-PN-001-0003
ST-PN-001-0004
ST-PN-001-0005
ST-PN-001-0006
ST-PN-001-0007

Finish

Gloss (no protective film)

Colors Available

White

Black

Material Specifications

		Test Method	Metric		Imperial	
THERMAL	Melting temperature (DSC, 10°C (50°F) / min)	ASTM D3418	°C	126.67	°F	260
	Coefficient of linear thermal expansion (-40 to 150 °C) (-40 to 300°F)	ASTM E-831 (TMA)	µm/(m.K)	120.60	µin./in./°F	67
	Heat Deflection Temperature: method A: 1.8 MPa (264 PSI)	ASTM D648	°C	80.00	°F	176
	Continuous allowable service temperature in air (20.000 hrs) (3)		°C	82.22	°F	180
	Flammability: UL 94 (3 mm (1/8 in.)) (5)			HB		HB
MECHANICAL	Tensile strength	ASTM D638 (8)	MPa	31.72	PSI	4600
	Tensile strain (elongation) at yield	ASTM D638 (8)			%	12
	Tensile strain (elongation) at break	ASTM D638 (8)			%	400
	Tensile modulus of elasticity	ASTM D638 (8)	GPa	1.45	KSI	210
	Compressive strength	ASTM D695 (11)	MPa	31.72	PSI	4600
	Izod Impact notched	ASTM D256	J/cm		ft·lb/in	1.3
	Flexural strength	ASTM D790 (13)	MPa	31.72	PSI	4600
	Flexural modulus of elasticity	ASTM D790	GPa	1.20	KSI	174
	Shore hardness D (14)	ASTM D2240				70
ELECTRICAL	Surface resistivity	ANSI/ESD STM 11.11			Ohm/sq.	1.00E+15
OTHER	Specific Gravity	ASTM D792			-	0.96
	Dynamic Coefficient of Friction (-)	QTM 55007 (20)				0.2