

# KING HY-PACT®

## Tolerance information:

Gauges 1/8" through 1" ± 5% | Length and width plus only at room temperature

Custom sheet sizes, gauges and colors available

Properties	Units	ASTM	King Hy-Pact® Nominal Values	King Hy-Pact® VH Nominal Values
Density	g/cc	D1505	0.95	0.95
Tensile Strength @ Yield	p.s.i.	D638	>4,100	>3,800
Elongation @ Yield	%	D638	9.6	N/A
Flexural Modulus	p.s.i.	D790	186,000	155,000
Durometer	Shore D	D2240	65	65
Izod Impact	ft.lbs./in. <sup>2</sup>	D256	16.6	No Break
Brittleness Temp.	°C (°F)	D746	<-90°C (<-130°F)	<-38°C (<-36.4°F)
Vicat Softening Temp.	°C (°F)	D1525	130°C (266°F)	124°C (255°F)
Heat Deflection Temp. 66 p.s.i.	°C (°F)	D648	75°C (167°F)	71°C (160°F)
Coefficient of Linear Expansion	in/in/°f	D696	6.0 x 10 <sup>-5</sup>	7.0 x 10 <sup>-5</sup>

QUV Accelerated Weathering Tester	King StarBoard® UV Protected		King Hy-Pact® UV Protected		UHMW UV Protected		ASTM
	Unexposed	2,000 hours of exposure	Unexposed	2,000 hours of exposure	Unexposed	2,000 hours of exposure	
Tensile @ yield 70 F (psi)	4,260	4,250	<b>4,100</b>	<b>4,100</b>	3,010	2,970	D638
Elongation @ yield 70 F (%)	9.2	9.1	<b>9.6</b>	<b>9.6</b>	16	3.2	D638
Tensile @ Break 70 F (psi)	690	680	<b>1,930</b>	<b>1,440</b>	No Break	2,940	D638
Elongation @ Break 70 F (%)	160	155	<b>260%</b>	<b>210%</b>	No Break	3.4%	D638
Taber Index	21	45	<b>5</b>	<b>12</b>	2	182	D4060
IZOD notch 70 F (ft lbs/sq in)	4.1	3.9	<b>16.6</b>	<b>15.7</b>	20.02	0.84	D256
Coefficient of Friction - Kinetic	0.0888	0.0888	<b>0.107</b>	<b>0.107</b>	0.129	0.129	D1894
Coefficient of Friction - Static	0.0832	0.0832	<b>0.102</b>	<b>0.102</b>	0.102	0.102	D1894

All values are determined on specimens prepared according to ASTM Standards.

King HY-PACT® is made entirely from FDA approved materials.

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