



Industrial Products



The Super Tough Industrial Polymer Sheet

King Hy-Pact® is the super tough industrial polymer sheet that is environmentally stabilized with excellent physical properties. Tests have shown after 2,000 hours of UV exposure, King Hy-Pact® outperforms both UV stabilized HDPE and UHMW with superior toughness in wear resistance, flexibility and high-impact strength.

King Hy-Pact® has a clean white color with a smooth, non-skived finish for better material flow. King Hy-Pact® is produced in K-Stran™, our advanced proprietary manufacturing process of quality sheets with tight tolerances and custom widths up to 60". Applications include, but are not limited to, food processing chutes, star wheels, fabricated parts, snowplow blades and dock fenders. King Hy-Pact® is the smart choice for many high abuse applications requiring superior properties, outstanding flatness and a smooth surface while providing significant cost savings compared to UHMW.

^{KING}HY-PACT®

Applications

- Abrasion and Wear
- Bin and Mixer Linings
- Chain and Belt Guides
- Conveyor Wear and Guide Rails
- Dock Fenders
- Food Processing
- Gears
- Low Temp. Applications
- Machine Parts
- Material Handling
- Sprockets
- Star Wheels
- Truck Bed Liners

Specifications

Standard Sheet Size

in: 48" x 120"

mm: 1219mm x 3048mm

Custom widths (up to 60")

Standard Gauges (Black 1/2" and 3/4" only)

in:	1/8"	1/4"	3/8"	1/2"	3/4"	1"
mm:	3.175mm	6.35mm	9.525mm	12.7mm	19.05mm	25.4mm

Approximate Weight

lbs:	25 lbs	50 lbs	75lbs	99 lbs	149 lbs	198 lbs
kg:	11.3398kg	22.6796kg	34.0194kg	44.9056kg	67.5853kg	89.8113kg

Tolerance information:

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

Custom sheet sizes and gauges available

Standard Colors



White



Black

*Note: Color accuracy can vary considerably on computer monitors and printers. Please consult your distributor for a product sample before making critical color choices.

Properties	Units	ASTM	Nominal Values
Density	g/cc	D1505	0.95
Tensile Strength @ Yield	p.s.i.	D638	>4,100
Elongation @ Yield	%	D638	9.6
Flexural Modulus	p.s.i.	D790	186,000
Durometer	Shore D	D2240	65
Izod Impact	ft.lbs./in. ²	D256	16.6
Brittleness Temp.	°C (°F)	D746	<-90°C (<-130°F)
Vicat Softening Temp.	°C (°F)	D1525	130°C (266°F)
Heat Deflection Temp. 66 p.s.i.	°C (°F)	D648	75°C (167°F)
Coefficient of Linear Expansion	in/in/°f	D696	6.0 x 10 ⁻⁵
Miller Number / SAR Reults	SAR	G75	3209
Taber	Index	D4060	5

	King StarBoard® UV Protected		King Hy-Pact® UV Protected		UHMW UV Protected		ASTM
QUV Accelerated Weathering Tester	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	4,100	4,100	3,010	2,970	D638
Elongation @ yield 70 F (%)	9.2	9.1	9.6	9.6	16	3.2	D638
Tensile @ Break 70 F (psi)	690	680	1,930	1,440	No Break	2,940	D638
Elongation @ Break 70 F (%)	160	155	260%	210%	No Break	3.4%	D638
Taber Index	21	45	5	12	2	182	D4060
IZOD notch 70 F (ft lbs/sq in)	4.1	3.9	16.6	15.7	20.02	0.84	D256
Coefficient of Friction - Kinetic	0.0888	0.0888	0.107	0.107	0.129	0.129	D1894
Coefficient of Friction - Static	0.0832	0.0832	0.102	0.102	0.102	0.102	D1894
Miler Number/SAR Results	8643.3	---	3209.0	---	453.9	---	G75

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

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



King Plastic Corporation
Our Innovation. Your Imagination.®

1100 N. Toledo Blade Blvd. | North Port, FL 34288 USA
P: 941.493.5502 | F: 941.497.3274 | www.kingplastic.com