# HIGH DENSITY POLYETHYLENE (HDPE)

Hitec HDPE is a high impact, abrasion resistant, high desity polyethylene sheet. It is ideally suited for the manufacture of chemical resistant products, mechanical wear products, and machine parts. Hitec is also FDA compliant for applications that come in direct contact with foodstuffs (FDA 21 CFR 177.1520).

#### **FEATURES AND BENEFITS**

- · Hardness Hitec is abrasion resistant and will resist scratching.
- · Strength Hitec has high tensile and stiffness for machine parts and tank applications.
- · Ductility Hitec is stress crack resistant.
- · Machinable Hitec is easy to machine with conventional tools.

### **APPLICATIONS**

- Business Machine Parts
- Guides and Wear Plates
- · Cams, Washers, Shims
- Packing Rings in Chemical Applications
- Low Speed Bearings
- Laboratory Vessels

- · Rotors and Blades
- · Roll Stand Bearings
- Nuclear Storage Containers
- Skids and Deflector Plates
- Tank, Chute and Bin Linings



### Hitec® High-Density Polyethylene (HDPE) Typical Properties

PROPERTY	UNITS	VALUE	ASTM METHOD	
Physical				
ASTM Type, Class, Category	-	IV, A, 4	D 1248	
Cell Classification	_	42662A	D3350	
Density	g/cm <sup>3</sup>	0.960	D 1505	
Hardness	Shore D	69	D 2240	
Mechanical				
Tensile Strength @ Break	psi	4500	D 638	
Elongation @ Break	%	>400	D 638	
Flexural Modulus	psi	225,000	D 790	
Tensile Impact, (2)	ft-lb/in	120	D 1822	
Izod Impact	ft-lb/in	3.0	D 256	
Thermal				
Low Temperature Brittleness, F50	°C	< -76	D 746	
Heat Deflection Temperature @ 66 PSI	°C	82	D 648	
Vicat Softening Point	°C	129	D 1525	



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## Hitec® High-Density Polyethylene (HDPE) Product Availability

COLOR	FINISH	THICKNESS	WIDTH	LENGTH
		1/8"-3"	48"	96"
Black	Smooth	1/8"-3"	48"	120"
		1/4"-2"	60"	120"
Natural (FDA approved)		1/4"-2"	48"	96"
	Smooth	1/4"-2"	48"	120"
		1/4"-2"	60"	120"



#### WARRANTY

All sheeting guaranteed void free, the limit of our warranty is your money refunded or defective material replaced; no other warranties are expressed or implied.

\* Physical properties of plastic sheeting are presented as "Typical." Information contained herein is considered accurate to the best of our knowledge. It is offered for your consideration and investigation, and is not to be construed as a representation or warranty expressed or implied, for which the Compression Polymers Corp. assumes any legal responsibility. Our warranties are limited to those expressly stated in formal contracts or in conditions of sale on our invoices and order acceptances. Conditions and methods of use vary and are beyond the control of Compression Polymers Corp., therefore, Compression Polymers Corp. disclaims any liability incurred as a result of the use of its products in accordance with the data contained on our physical property charts. No information herein shall be construed as an offer of indemnity for infringement or as a recommendation to use the products in such a manner as to infringe any patent, domestic or foreign.

The "typical" properties of our plastic sheet cannot be automatically used when engineering finished fabricated components; and the fabricator or the end user is responsible for insuring the suitability of our products for their specific application or end use!