

HDPE

High Density Polyethylene



Cebelio

www.cebelio.co.nz

Description

HDPE offers high heat stability and high impact strength, HDPE is a versatile material and is used widely for industrial, orthotic and prosthetic applications. It has good chemical resistance, electrical insulation properties, is food grade and has good resistance to temperature, being able to operate in the range of -50C to 80C though this does vary from grade to grade. The material has good abrasion resistance and is thermoformable and weldable.

Uses

HDPE is used widely used in industrial applications. Common applications include:

- Aviation and Transportation
- Medical Orthotics and Prosthetics
- Cabinetry and Outdoor Furniture
- Food and Beverage Processing
- Restroom, Shower Partitions and Lockers

Basic info

- ✓ High Impact Resistance
- ✓ Tough and durable
- ✓ High-temperature resistance
- ✓ Chemical Resistant
- ✓ Corrosion Resistant
- ✓ Suitable exterior use



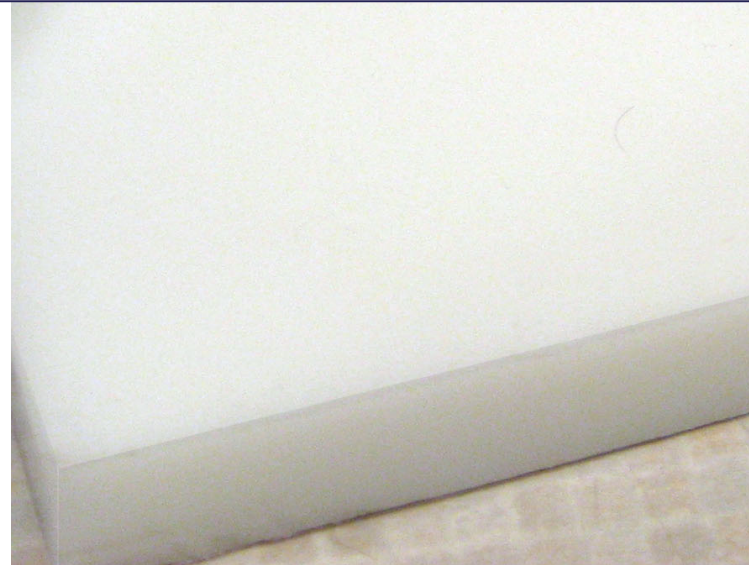


HDPE DATA

Availability

Gauge (mm)	Finish	Sheet size (mm)
12.00	White Smooth	2440 x 1370
19.00	White Smooth	3060 x 1230

We carry gauges 12 and 19mm however there is a wide range available, please contact us for alternative sheet sizes, finishes and gauges.



Technical Properties

Physical	Test Method	Units	HDPE
Specific Gravity/Relative Density	ASTM D-792		0.96
Water Absorption	ASTM D-570	% By wt	>0.01
Mechanical	Test Method	Units	HDPE
Tensile Strength	ASTM D - 638	psi	4,400
Elongation at break	ASTM D - 638	%	>300
Flexural Modulus of Elasticity	ASTM D - 790	psi	190,000
Izod Impact Strength notched	ASTM D - 256	Ft-lb/in Notch	2.75
Shore Hardness D	ASTM D - 2240		65
Coefficient of Friction, (static/dynamic)	ASTM C - 1894	Static/Dynamic	0.2/0.2
Continuous Service Temperature (Maximum) °F	-	°F	170
Melting Point, °F	ASTM D - 3418	°F	267
Coefficient of Thermal Expansion, in./in./°F, D696	ASTM D - 696	in./in./°F.	10 x 10 ⁻⁵
Heat Deflection Temperature at 66 psi, °F	ASTM D - 648	°F	167
Heat Deflection Temperature at 264 psi, °F	ASTM D - 648	°F	110
Regulatory Code	FDA		

*The results of this Datasheet are just for information or comparison purposes only and should be used as a guide. This information is believed to be accurate. It is intended for professional end-users who have the skills required to evaluate and use the data properly. Cebelio Holdings LTD. does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

Contact

Physical

Cebelio LTD
22 Tanner Street
Woolston
Christchurch
New Zealand

Postal

PO BOX 9316
Tower Junction
Christchurch
New Zealand
8024