POLYSTYRENE

(HIPS, high impact polystyrene)

High impact polystyrene is a low cost, tough plastic material that is easy to thermoform and fabricate. It is often used for countertop point-of-purchase displays, banners, and indoor signs. The material can be assembled with mechanical fasteners, solvents, or adhesives.

Printable grades of high impact polystyrene can be decorated using a variety of printing methods including screen printing, offset lithography, and flexography.

HIPS sheet is available in a wide variety of colors and textures.

KEY CHARACTERISTICS:

- Low cost
- Easy to paint or print on
- Easy to assemble with adhesives or solvents
- Outstanding thermoforming characteristics
- Good machinability
- High impact strength
- FDA compliant grades available
- Available in a wide variety of colors and textures

APPLICATIONS:

- Point-of-purchase displays
- Printed advertising graphics
- Models and prototypes
- Thermoformed machine housings

HIGH IMPACT POLYSTYRENE TYPICAL PROPERTIES:

	UNITS	ASTM TEST	HIGH IMPACT POLYSTYRENE
Tensile strength	psi	D-638	3,500
Flexural modulus	psi	D-790	310,000
Izod impact (notched)	ft-lbs/in of notch	D-256	2.0
Heat deflection temperature @264 psi	^{o}F	D-648	185
Maximum continuous service temperature in air	^{o}F		-
Water absorption (immersion 24 hours)	%	D-570	-
Coefficient of linear thermal expansion	in/in/^{o}Fx10^{-5}	D-696	4.5

Standard Sizes: SHEET: 48"x96" (0.03"-0.25" thick)

Length, width, thickness, and diameter tolerances vary by size and by manufacturer • Custom sizes and colors available upon request • Many of our materials are available as films with thicknesses of 0.029" or less. Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.

Curbell Plastics has been supplying plastic sheet, rod, tube, films, adhesives, sealants, and prototyping materials for over 65 years

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