

High Impact Polystyrene, HIPS

HIPS is a versatile cost-effective material engineered from tough polystyrene resins. It is often specified for low strength structural applications when impact resistance, machinability, and low cost are required. It has excellent dimensional stability and is easy to fabricate – it can be guillotine cut, die-cut, punched, and also painted and glued, properties that make it a popular option for machining pre-production prototypes. Natural (translucent white) HIPS is FDA compliant for use in food processing applications.

- · High impact strength
- · Good machinability
- · Easy to glue, paint, and print
- Outstanding thermoforming characteristics

TECHNICAL DATA SHEET | (EFFECTIVE 24FEB25)

High Impact Polystyrene, HIPS

PHYSICAL PROPERTY	TEST METHOD	UNIT	VALUE3
Specific Gravity	D-792	g/cc	1.04
Melt Flow @ 200°C/5g	D-1238	g/10min	2.5
Tensile @ Yield	D-638	psi	29000
Flexural Modulus	D-790	psi	2900
Elongation @ Failure	D-638	%	70
Hardness, Rockwell	D-785	M-Scale	75
Notched Izod @ 73°F	D-256	ft-lb/in	2.1
HDT @ 264 psi	D-648	۰F	183
Vicat Softening Point	D-1525	°F	210
Impact Strength	-	-	High
Low Temperature Impact Strength	-	-	Average
Tensile Strength	-	-	High
Flexural Strength	-	-	High
Heat Deflection Temperature	-	-	Average



Practi-Shim™ Shim Stock

PHYSICAL PROPERTY	UNIT	PRACTI-SHIM™ #222	PRACTI-SHIM™ #333	
Detergent Oils 194°F (90°C)	-	Not Suitable	Suitable	
Other Hydrocarbon Oils	-	Suitable	Not Suitable	
Ammonium Hydroxide	-	Not Suitable	Not Suitable	
Other Info	-	solvents without deterio material. All materials sh for food and drink conta	Surface coloring on grade #222 may dissolve in solvents without deterioration to the base material. All materials should be tested for suitability for food and drink contact as well as other performance requirements.	