



Prime Impax 450 is a formulated High Impact Polystyrene. It provides good toughness, stiffness and impact strength. It is designed to meet a wide variety of product applications and is one of the most versatile and inexpensive materials we supply. Prime Impax 450 is our standard thermoforming grade of High Impact Polystyrene.



# PRIME IMPAX 450

Prime Impax 450	High	Avg.
Impact Strength	*	
Low Temperature Impact Strength		*
Tensile Strength	*	
Flexural Modulus	*	
Heat Deflection Temperature		*

Property	Test Method	Value	Unit
Specific Gravity	D-792	1.04	
Melt Flow	D-1238	2.5	g/10min
Tensile @ Yield	D-638	2900	psi
Tensile Modulus	D-638	275,000	psi
Elongation @ Break	D-638	70	%
Flexural Modulus	D-790	300,000	psi
Notched Izod @ 73°F	D-256	2.1	ft-lb/in
HDT @ 264 psi	D-648	183	°F
Vicat Softening Point	D-1525	210	°F

Complies with UL 94 HB at thickness >.039 in.

## Applications:

Prime Impax 450 is FDA Compliant. Some applications include Signs, credit cards, medical packaging, building products, displays, Furniture and computer products. With a GP styrene cap it is also ideal for wall surrounds, bathtubs and other interior applications such as cabinet drawer silverware holders.

## Finishing:

Prime Impax 450 can be fabricated by drilling, routing, sawing, die cut and/or laser cutting. Mechanical fasteners may be used as well as chemical bonding and sonic welding. We provide Prime Impax 450 in sheet or roll stock and are capable of holding extremely tight tolerances by either square cutting or slitting.

## Processing:

Since it is an amorphous thermoplastic material it is relatively easy to process in extrusion and thermoforming. The mold shrink is .003 - .006 in./in. It can be formed on aluminum, ceramic, fiberglass, epoxy and even wood tools.

## Colors, Textures and Capabilities

Prime Impax 450 can be color matched to meet your specific requirements. It is offered in thicknesses of .010 - .400 and widths of up to 120". Textures available include; smooth, matte, Seville, RM, HC, Calf Grain, Levant, FL/HC and even flocked. Silicone coating, anti-stat, UVI and protective masking are also available.

Please contact your Primex Plastics representative for more information on finishing, fabricating, or the thermoforming process.

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*Large enough to handle YOUR requirements,  
small enough to handle YOUR needs.*

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