

# Prime Impax 450

High Impact Polystyrene

Primex Plastics Corporation

Message:

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

Applications:

Prime Impax 450 is FDA approved. 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.

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.

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.

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

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, antistat, UVI and protective masking are also available.

General Information	
Features	Amorphous
	Bondability
	Good Stiffness
	Good Toughness
	High Impact Resistance
	High Tensile Strength
	Ultrasonic Weldable
Uses	Bathroom Accessories
	Building Materials
	Computer Components
	Consumer Applications
	Decorative Displays
	Furniture
	Medical Packaging
Agency Ratings	FDA Unspecified Rating
Appearance	Colors Available
Forms	Sheet
Processing Method	Extrusion
	Thermoforming

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.04	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.30 to 0.60	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1900	MPa	ASTM D638
Tensile Strength (Yield)	20.0	MPa	ASTM D638
Tensile Elongation (Break)	70	%	ASTM D638
Flexural Modulus	2070	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	110	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	83.9	°C	ASTM D648
Vicat Softening Temperature	98.9	°C	ASTM D1525
Flammability	Nominal Value		Test Method
Flame Rating <sup>1</sup> (0.991 mm)	HB		UL 94
NOTE			

1. >0.039 in

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

