



Prime Impax 250 is a formulated High Impact Polystyrene that provides quality toughness, stiffness and impact strength. Prime Impax 250 is designed to meet a wide variety of product applications and is one of the most versatile, inexpensive materials we supply. It is our standard thermoforming grade of High Impact Polystyrene.



## PRIME IMPAX 250

Prime Impax 250	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	g/cc
Melt Flow@200°C/5g	D-1238	2.5	g/10min
Tensile @ Yield	D-638	2900	psi
Flexural Modulus	D-790	275,000	psi
Elongation @ Failure	D-638	70	%
Hardness, Rockwell	D-785	75	M-Scale
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 >.060 in.  
 Complies with FDA Regulation 21 CFR 177.1640  
 Complies w/USP Class VI, can be sterilized by Gamma Radiation or ETO

### Applications:

Prime Impax 250 is FDA compliant and USP Class VI compliant. With its ease of processing, it provides trays with the rigidity and parallelism need for good sealing. It is able to withstand Gamma Radiation and ETO sterilization.

### Finishing:

Prime Impax 250 can be fabricated by drilling, routing, sawing, die cut and/or laser cutting. Mechanical fasteners may be used as well laaser cutting. We provide Prime Impax 250 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 250 is available in natural and white. It is offered in thicknesses of .008 -.125 and widths of up to 53".with a M/M surface.

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

Notice: All statements, information, and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation of warranty that such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated, or that other measures may not be required.

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

Distributed by



info@polymershapes.com  
 866-437-7427



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 >.060 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.

Notice: All statements, information, and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation of warranty that such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated, or that other measures may not be required.

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

Distributed by



info@polymershapes.com  
866-437-7427



Prime Impax 650D is a formulated High Impact Polystyrene. Special consideration has been given to this material selection and processing techniques to provide an affordable media that is up to the demands of digital printing.



## PRIME IMPAX 650D

Prime Impax 650D	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	g/cc
Melt Flow Condition G	D-1238	3.0	g/10min
Tensile @ Yield	D-638	3000	psi
Flexural Modulus	D-790	240,000	psi
Elongation @ Break	D-638	50	%
Notched Izod @ 73°F	D-256	2.3	ft-lb/in
HDT @ 264 psi	D-648	185	°F
Vicat Softening Point	D-1525	212	°F

Complies with UL 94 HB at thickness >.059 in.  
Complies with FDA Regulation 21 CFR 177.1640

### Applications:

Prime Impax 650D is FDA compliant, satisfies the UL 94 HB criteria and is suitable for use in all digital printing applications such as signs, gift cards, and menu boards.

### Finishing:

Prime Impax 650D can be fabricated by drilling, routing, sawing, die cutting and laser cutting. We provide Prime Impax 650D in sheet or roll stock and are capable of holding extremely tight tolerances by either square cutting or slitting.

### Processing:

With an embossed matte surface, the use of materials with large rubber particle size, and specialized corona treatment. Prime Impax 650D is positioned to provide trouble free processing on today's high speed large and small format digital process.

### Colors, Textures and Capabilities

Prime Impax 650D 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, and matte with guide lines, UVI and protective masking also available.

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

Notice: All statements, information, and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation of warranty that such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated, or that other measures may not be required.

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

Distributed by



info@polymershapes.com  
866-437-7427



Prime Impax 6450D is a formulated High Impact Polystyrene. Special consideration has been given to this material selection and processing techniques to provide an affordable media that is up to the demands of digital printing.



## PRIME IMPAX 6450D

Prime Impax 6450D	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	g/cc
Melt Flow Condition G	D-1238	3.0	g/10min
Tensile @ Yield	D-638	3000	psi
Flexural Modulus	D-790	240,000	psi
Elongation @ Break	D-638	50	%
Notched Izod @ 73°F	D-256	2.3	ft-lb/in
HDT @ 264 psi	D-648	185	°F
Vicat Softening Point	D-1525	212	°F

Complies with UL 94 HB at thickness >.059 in.  
Complies with FDA Regulation 21 CFR 177.1640

### Applications:

Prime Impax 6450D is FDA compliant, satisfies the UL 94 HB criteria and is suitable for use in all digital printing applications such as signs, gift cards, and menu boards.

### Finishing:

Prime Impax 6450D can be fabricated by drilling, routing, sawing, die cutting and laser cutting. We provide Prime Impax 6450D in sheet or roll stock and are capable of holding extremely tight tolerances by either square cutting or slitting.

### Processing:

With an embossed matte surface, the use of materials with large rubber particle size, and specialized corona treatment. Prime Impax 6450D is positioned to provide trouble free processing on today's high speed large and small format digital process.

### Colors, Textures and Capabilities

Prime Impax 6450D 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, and matte with guide lines, UVI and protective masking also available.

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

Notice: All statements, information, and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation of warranty that such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated, or that other measures may not be required.

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

Distributed by

 **Polymershapes**

info@polymershapes.com  
866-437-7427