

# STYRON™ 486M

## High-Impact Polystyrene Resins

STYRON™ 486M is a high impact polystyrene resin with an excellent balance of toughness, stillness, flow and heat resistance. It is suitable for both injection molding and extrusion applications

### Main Characteristics

- Good practical toughness
- Easy processing
- UL94 HB
- FDA compliance  
\* U.S. FDA 21 CFR177.1640  
\* Europe Regulation (EU) No 10/2011

### Applications

- Audio enclosures
- Media enclosures
- Toys
- Food containers
- Small appliances

Properties	Test Method	Unit	Typical Value
<b>Physical</b>			
Melt Flow Rate (200 deg C/5 kg)	ASTM D1238	g/10 min	3
Density	ASTM D792	g/cm <sup>3</sup>	1.04
Mold Shrinkage	ASTM D955	in/in	0.004-0.007
UL 94 Classification @ 1.5 mm			HB
<b>Injection Molded Properties</b>			
<b>Mechanical</b>			
Yield, Tensile Strength	ASTM D638	psi	3900
Ultimate, Tensile Strength	ASTM D638	psi	3700
Break Elongation	ASTM D638	%	40
Flexural Strength	ASTM D790	psi	7300
Flexural Modulus	ASTM D790	psi	313000
Notched Izod @ 23 deg C	ASTM D256	ft-lb/in	2.1
<b>Compression Molded Properties</b>			
<b>Mechanical</b>			
Yield Tensile Strength	ASTM D638	psi	3100
Ultimate Tensile Strength	ASTM D638	psi	2500
Break Elongation	ASTM D638	%	35
Flexural Strength	ASTM D790	psi	5600
Flexural Modulus	ASTM D790	psi	283000
Notched Izod @ 23 deg C	ASTM D256	ft-lb/in	1.6
<b>Thermal</b>			
Vicat Softening Point	ASTM D1525	deg C	102
Deflection Temperature Under Load @ 1.82 Mpa, unannealed	ASTM D648	deg C	73.9
Deflection Temperature Under Load @ 1.82 Mpa, annealed	ASTM D648	deg C	97.2

Notes

These are typical properties only and are not to be construed as specification. Users should confirm results by their own tests