

XQ 83180.00

High-Impact Polystyrene Resins

XQ 83180.00 is a high impact polystyrene resin with combination of high gloss, high flow, high heat, excellent stiffness and good practical toughness. It is designed for injection molding applications.

Main Characteristics

- Good Stiffness
- Good practical toughness
- High gloss & High Flow
- UL94 HB
- FDA compliance
- * U.S. FDA 21 CFR177.1640

Applications

- Air Conditioner
- Printers
- Small Appliances

Properties	Test Method	Unit	Typical Value
Physical			
Melt Flow Rate (200 deg C/5 kg)	ASTM D1238	g/10 min	7.5
Density	ASTM D792	g/cm ³	1.04
Mold Shrinkage	ASTM D955	in/in	0.004-0.007
UL 94 Classification @ 1.5 mm			HB

Injection Molded Properties

Mechanical

Yield, Tensile Strength	ASTM D638	psi	4000
Ultimate, Tensile Strength	ASTM D638	psi	4000
Break Elongation	ASTM D638	%	50
Flexural Strength	ASTM D790	psi	7300
Flexural Modulus	ASTM D790	psi	291000
Notched Izod @ 23 deg C	ASTM D256	ft-lb/in	2.0

Compression Molded Properties

Mechanical

Yield Tensile Strength	ASTM D638	psi	3500
Ultimate Tensile Strength	ASTM D638	psi	2800
Break Elongation	ASTM D638	%	45
Flexural Strength	ASTM D790	psi	6100
Flexural Modulus	ASTM D790	psi	261000
Notched Izod @ 23 deg C	ASTM D256	ft-lb/in	1.6

Thermal

Vicat Softening Point	ASTM D1525	deg C	101
Deflection Temperature Under Load @ 1.82 Mpa, unannealed	ASTM D648	deg C	78.5
Deflection Temperature Under Load @ 1.82 Mpa, annealed	ASTM D648	deg C	87.9

Optical

Gloss (60°)	ASTM D523		97
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Notes

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