

STYRON A-TECH™ 1175

High-Impact Polystyrene Resins

STYRON A-TECH™ 1175 is a high impact, environment stress crack resistance (ESCR) resins, design for extrusion and thermoforming applications, especially for the refrigeration industry. The resin allows for potential downgauging and scrap reduction in the thermoforming process.

Main Characteristics

- Allow for downgauging
- ESCR to food stuff and hydrocarbons
- Ease of processing in extrusion and thermoforming
- Increased rigidity
- Excellent thermoforming behavior

Applications

- Large appliance/refrigerator liners
- General extrusion/thermoforming applications requiring ESCR

Complies with

- * EUROPE REGULATION (EC) 10/2011
 - * U.S. FDA 21 CFR177.1640
- Consult the regulations for complete details*

Properties	Test Method	Unit	Typical Value
Physical			
Melt Flow Rate (200 deg C/5 kg)	ASTM D1238	g/10 min	2.8
Specific Gravity	ASTM D792	g/cm ³	1.05
UL 94 Classification @ 1.5 mm			HB
Injection Molded Properties			
Mechanical			
Yield, Tensile Strength	ASTM D638	psi	2200
Ultimate, Tensile Strength	ASTM D638	psi	3400
Break Elongation	ASTM D638	%	60
Tensile Modulus	ASTM D638	psi	240000
Flexural Strength	ASTM D790	psi	5600
Flexural Modulus	ASTM D790	psi	240000
Notched Izod @ 23 deg C	ASTM D256	ft-lb/in	2
Thermal			
Vicat Softening Point	ASTM D1525	deg C	100
Deflection Temperature Under Load @ 1.82 MPa, unannealed	ASTM D648	deg C	68

Notes

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