

## Solvay Specialty Polymers EpiSpire<sup>®</sup> EP-340 Sulfone, High Temperature (HTS)

Category : Polymer , Thermoplastic , Polysulfone (PSU)

### Material Notes:

EpiSpire<sup>®</sup> EP-340 is a high-temperature, high-performance, amorphous, sulfone polymer. With a glass transition temperature of 265<sup>°</sup>C (509<sup>°</sup>F) and a heat deflection temperature of 255<sup>°</sup>C (491<sup>°</sup>F), EpiSpire<sup>®</sup> EP-340 resin offers one the highest glass transition temperatures for fully thermoplastic transparent resin. In addition to this exceptional thermal performance, this resin exhibits the other performance features and attributes typical of aromatic sulfone polymers. These features include good strength, stiffness, and dielectric properties over a wide temperature range, resistance to hydrolysis by hot water and steam environments, excellent resistance to acids and bases, and inherent flammability resistance. The resin also offers a high degree of dimensional control during fabrication and dimensional stability during part service life. Features: Acid Resistant; Amorphous; Base Resistant; Flame Retardant; Good Chemical Resistance; Good Dimensional Stability; Good Stiffness; Good Strength; High Heat Resistance; Hydrolysis Resistant; Steam Resistant Uses: Metal Replacement Additional Properties: Glass Transition Temperature - ASTM E1356 265 <sup>°</sup>C; Unnotched Izod Impact - ASTM D4812 No Break Information provided by Solvay Specialty Polymers.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Solvay-Specialty-Polymers-EpiSpire-EP-340-Sulfone-High-Temperature-HTS.php](http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-EpiSpire-EP-340-Sulfone-High-Temperature-HTS.php)

Physical Properties	Metric	English	Comments
Density	1.35 g/cc	0.0488 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.80 % @Time 86400 sec	0.80 % @Time 24.0 hour	ISO 62
Linear Mold Shrinkage, Flow	0.000090 cm/cm	0.000090 in/in	
Melt Flow	10 g/10 min @Load 5.00 kg, Temperature 400 <sup>°</sup> C	10 g/10 min @Load 11.0 lb, Temperature 752 <sup>°</sup> F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	94.0 MPa	13600 psi	ASTM D638
Elongation at Break	15 % @Temperature 23.0 <sup>°</sup> C	15 % @Temperature 73.4 <sup>°</sup> F	ASTM D638
	>= 50 % @Temperature 235 <sup>°</sup> C	>= 50 % @Temperature 455 <sup>°</sup> F	ASTM D638
Elongation at Yield	7.7 %	7.7 %	ASTM D638
Tensile Modulus	2.50 GPa	363 ksi	ASTM D638

Flexural Strength Mechanical Properties	116 MPa Metric	16800 psi English	ASTM D790 Comments
Flexural Modulus	2.60 GPa	377 ksi	ASTM D790
Izod Impact, Notched	0.910 J/cm	1.70 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	255 Â°C @Thickness 3.20 mm	491 Â°F @Thickness 0.126 in	Annealed; ASTM D648

Optical Properties	Metric	English	Comments
Haze	15 % @Thickness 2.50 mm	15 % @Thickness 0.0984 in	ASTM D1003
Yellow Index	80 % @Thickness 2.50 mm	80 % @Thickness 0.0984 in	ASTM D1925
Transmission, Visible	45 % @Thickness 2.50 mm	45 % @Thickness 0.0984 in	ASTM D1003

Processing Properties	Metric	English	Comments
Melt Temperature	390 - 410 Â°C	734 - 770 Â°F	
Mold Temperature	180 - 210 Â°C	356 - 410 Â°F	
Drying Temperature	149 Â°C	300 Â°F	
	177 Â°C @Time 14400 sec	351 Â°F @Time 4.00 hour	

Descriptive Properties	Value	Comments
Availability	Asia Pacific	
	Europe	
	North America	
Color	Clear Amber; Natural	
Form	Pellets	
Screw Compression Ratio	2.2:1.0	

Contact Songhan Plastic Technology Co.,Ltd.

**Website : [www.lookpolymers.com](http://www.lookpolymers.com)**

**Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)**

**Tel : +86 021-51131842**

**Mobile : +86 13061808058**

**Skype : lookpolymers**

**Address : United North Road 215,Fengxian District, Shanghai City,China**