

## SABIC Innovative Plastics ULTEM DU319 PEI

Category : Polymer , Thermoplastic , Polyetherimide (PEI)

### Material Notes:

Transparent Polyetherimide blend. ECO Conforming. US FDA and EU Food Contact Compliant in recognized colors.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-ULTEM-DU319-PEI.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-ULTEM-DU319-PEI.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.29 g/cc	1.29 g/cc	ASTM D792
Density	1.30 g/cc	0.0470 lb/in <sup>3</sup>	ISO 1183
Moisture Absorption	0.170 %	0.170 %	23 <sup>o</sup> C / 50% RH; ISO 62
Water Absorption at Saturation	0.50 %	0.50 %	ISO 62
Linear Mold Shrinkage, Flow	0.0060 - 0.0070 cm/cm @Thickness 3.20 mm	0.0060 - 0.0070 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	8.1 g/10 min @Load 6.60 kg, Temperature 295 <sup>o</sup> C	8.1 g/10 min @Load 14.6 lb, Temperature 563 <sup>o</sup> F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	75.0 MPa	10900 psi	5 mm/min; ISO 527
	82.0 MPa	11900 psi	Type I, 5 mm/min; ASTM D638
Tensile Strength, Yield	110 MPa	16000 psi	Type I, 5 mm/min; ASTM D638
	110 MPa	16000 psi	5 mm/min; ISO 527
Elongation at Break	36 %	36 %	5 mm/min; ISO 527
	60 %	60 %	Type I, 5 mm/min; ASTM D638
Elongation at Yield	6.0 %	6.0 %	5 mm/min; ISO 527
	60 %	60 %	Type I, 5 mm/min; ASTM D638
Tensile Modulus	3.30 GPa	479 ksi	1 mm/min; ISO 527
	3.37 GPa	489 ksi	5 mm/min; ASTM D638
Flexural Yield Strength	155 MPa	22500 psi	2 mm/min; ISO 178
	165 MPa	23900 psi	2.6 mm/min, 100 mm span; ASTM D790

Mechanical Properties	Metric <sup>125</sup> /cm	English <sup>177</sup> -lb/in	Comments
	9.50 J/cm @Thickness 3.20 mm	17.8 ft-lb/in @Thickness 0.126 in	ASTM D256
Izod Impact, Notched (ISO)	4.00 kJ/m <sup>2</sup>	1.90 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1A
	4.00 kJ/m <sup>2</sup> @Temperature -30.0 °C	1.90 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	80*10*4; ISO 180/1A
Charpy Impact, Notched	0.300 J/cm <sup>2</sup>	1.43 ft-lb/in <sup>2</sup>	Edgew 80*10*4 sp=62mm; ISO 179/1eA
Dart Drop, Total Energy	40.0 J @Temperature 23.0 °C	29.5 ft-lb @Temperature 73.4 °F	ASTM D3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	48.6 µm/m-°C @Temperature -40.0 - 40.0 °C	27.0 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E 831
CTE, linear, Transverse to Flow	48.6 µm/m-°C @Temperature -40.0 - 40.0 °C	27.0 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E 831
Deflection Temperature at 1.8 MPa (264 psi)	165 °C @Thickness 6.40 mm	329 °F @Thickness 0.252 in	unannealed; ASTM D648
Vicat Softening Point	177 °C	351 °F	Rate B/50; ISO 306
	180 °C	356 °F	Rate B/120; ISO 306
	181 °C	358 °F	Rate B/50; ASTM D1525

Optical Properties	Metric	English	Comments
Transmission, Visible	90 %	90 %	transparent; thickness not quantified

## 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