

## SABIC Innovative Plastics ULTEM HU2400 PEI

Category : Polymer , Thermoplastic , Polyetherimide (PEI)

### Material Notes:

40% Glass fiber filled, standard flow Polyetherimide (Tg 217C). For medical devices and pharmaceutical applications. Healthcare management of change, biocompatible (ISO 10993 or USP Class VI), food contact compliant.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-ULTEM-HU2400-PEI.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-ULTEM-HU2400-PEI.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.61 g/cc	1.61 g/cc	ASTM D792
Density	1.61 g/cc	0.0582 lb/in <sup>3</sup>	ISO 1183
Moisture Absorption	0.400 %	0.400 %	23 <sup>o</sup> C / 50% RH; ISO 62
Water Absorption at Saturation	0.80 %	0.80 %	ISO 62
Linear Mold Shrinkage, Flow	0.0010 - 0.0030 cm/cm @Thickness 3.20 mm	0.0010 - 0.0030 in/in @Thickness 0.126 in	SABIC Method
Melt Index of Compound	5.0 g/10 min @Load 5.00 kg, Temperature 360 <sup>o</sup> C	5.0 g/10 min @Load 11.0 lb, Temperature 680 <sup>o</sup> F	MVR [cm <sup>3</sup> /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	179 MPa	26000 psi	Type I, 5 mm/min; ASTM D638
	180 MPa	26100 psi	5 mm/min; ISO 527
Tensile Strength, Yield	179 MPa	26000 psi	Type I, 5 mm/min; ASTM D638
	180 MPa	26100 psi	5 mm/min; ISO 527
Elongation at Break	2.0 %	2.0 %	5 mm/min; ISO 527
	2.5 %	2.5 %	Type I, 5 mm/min; ASTM D638
Elongation at Yield	2.0 %	2.0 %	5 mm/min; ISO 527
	2.5 %	2.5 %	Type I, 5 mm/min; ASTM D638
Tensile Modulus	11.5 GPa	1670 ksi	1 mm/min; ISO 527
	11.72 GPa	1700 ksi	5 mm/min; ASTM D638
Flexural Strength	240 MPa	34800 psi	2 mm/min; ISO 178
	241 MPa	35000 psi	1.3 mm/min, 50 mm span; ASTM

Flexural Yield Strength Mechanical Properties	Metric	English	D790 Comments
Flexural Modulus	10.0 GPa	1450 ksi	2 mm/min; ISO 178
	11.72 GPa	1700 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	1.12 J/cm	2.10 ft-lb/in	ASTM D256
Izod Impact, Unnotched (ISO)	35.0 kJ/m <sup>2</sup>	16.7 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1U
	35.0 kJ/m <sup>2</sup> @Temperature -30.0 Â°C	16.7 ft-lb/in <sup>2</sup> @Temperature -22.0 Â°F	80*10*4; ISO 180/1U
Charpy Impact Unnotched	4.00 J/cm <sup>2</sup>	19.0 ft-lb/in <sup>2</sup>	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	4.00 J/cm <sup>2</sup> @Temperature -30.0 Â°C	19.0 ft-lb/in <sup>2</sup> @Temperature -22.0 Â°F	Edgew 80*10*4 sp=62mm; ISO 179/1eU
Dart Drop, Total Energy	28.0 J	20.7 ft-lb	ASTM D3763
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	14.4 Âµm/m-Â°C	8.00 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	15.0 Âµm/m-Â°C	8.33 Âµin/in-Â°F	ISO 11359-2
	@Temperature 23.0 - 150 Â°C	@Temperature 73.4 - 302 Â°F	
CTE, linear, Transverse to Flow	14.4 Âµm/m-Â°C	8.00 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	45.0 Âµm/m-Â°C	25.0 Âµin/in-Â°F	ISO 11359-2
	@Temperature 23.0 - 150 Â°C	@Temperature 73.4 - 302 Â°F	
Deflection Temperature at 1.8 MPa (264 psi)	210 Â°C	410 Â°F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
	212 Â°C @Thickness 3.20 mm	414 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Vicat Softening Point	217 Â°C	423 Â°F	Rate B/50; ISO 306
	225 Â°C	437 Â°F	Rate B/120; ISO 306

Thermal Properties	Metric 231.4°C	English 423.4°F	Comments RoHS B/50, ASTM D1525
Glass Transition Temp, Tg	217 Â°C	423 Â°F	
UL RTI, Electrical	170 Â°C	338 Â°F	UL 746B
UL RTI, Mechanical with Impact	170 Â°C	338 Â°F	UL 746B
UL RTI, Mechanical without Impact	170 Â°C	338 Â°F	UL 746B
Oxygen Index	48 %	48 %	ISO 4589
Glow Wire Test	960 Â°C @Thickness 3.20 mm	1760 Â°F @Thickness 0.126 in	IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	ROA; IEC 60093
Dielectric Constant	3.1 @Frequency 1.00e+6 Hz	3.1 @Frequency 1.00e+6 Hz	IEC 60250
	3.5 @Frequency 50.0 - 60.0 Hz	3.5 @Frequency 50.0 - 60.0 Hz	IEC 60250
Dielectric Strength	16.0 kV/mm @Thickness 3.20 mm	406 kV/in @Thickness 0.126 in	in oil; IEC 60243-1
	26.0 kV/mm @Thickness 1.60 mm	660 kV/in @Thickness 0.0630 in	in oil; IEC 60243-1
	35.0 kV/mm @Thickness 0.800 mm	889 kV/in @Thickness 0.0315 in	in oil; IEC 60243-1
Dissipation Factor	0.0019 @Frequency 1.00e+6 Hz	0.0019 @Frequency 1.00e+6 Hz	IEC 60250
	0.0025 @Frequency 50.0 - 60.0 Hz	0.0025 @Frequency 50.0 - 60.0 Hz	IEC 60250
Comparative Tracking Index	150 V	150 V	IEC 60112

## **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**