

SABIC Innovative Plastics Ultem HU2410 PEI (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polyetherimide (PEI)

Material Notes:

40% Glass fiber filled, enhanced flow Polyetherimide (Tg 217C). ECO Conforming. For medical devices and pharmaceutical applications.

Healthcare management of change, biocompatible (ISO 10993 or USP Class VI), food contact compliant. This data was supplied by SABIC-IP for the Europe-Africa-Middle East region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Ultem-HU2410-PEI-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.61 g/cc	1.61 g/cc	ASTM D 792
Density	1.56 g/cc	0.0564 lb/in ³	ISO 1183
Water Absorption	0.13 %	0.13 %	ASTM D 570
	@Time 86400 sec	@Time 24.0 hour	
Moisture Absorption at Equilibrium	0.40 %	0.40 %	23 ^o C / 50% RH; ISO 62
	0.90 %	0.90 %	ASTM D 570
	@Temperature 23.0 ^o C	@Temperature 73.4 ^o F	
Water Absorption at Saturation	0.80 %	0.80 %	ISO 62
	@Temperature 23.0 ^o C	@Temperature 73.4 ^o F	
Linear Mold Shrinkage, Flow	0.0010 - 0.0030 cm/cm	0.0010 - 0.0030 in/in	SABIC Method
	@Thickness 3.20 mm	@Thickness 0.126 in	
Melt Flow	5.2 g/10 min	5.2 g/10 min	ASTM D 1238
	@Load 6.60 kg, Temperature 337 ^o C	@Load 14.6 lb, Temperature 639 ^o F	
	11 g/10 min	11 g/10 min	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	@Load 5.00 kg, Temperature 220 ^o C	@Load 11.0 lb, Temperature 428 ^o F	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	179 MPa	26000 psi	Type I, 5 mm/min; ASTM D 638
	180 MPa	26100 psi	5 mm/min; ISO 527
Tensile Strength, Yield	180 MPa	26100 psi	5 mm/min; ISO 527

Mechanical Properties	186 MPa Metric	27000 psi English	Type I, 5 mm/min; ASTM D 638 Comments
Elongation at Break	2.0 %	2.0 %	5 mm/min; ISO 527
	2.5 %	2.5 %	Type I, 5 mm/min; ASTM D 638
Elongation at Yield	2.0 %	2.0 %	5 mm/min; ISO 527
	2.5 %	2.5 %	Type I, 5 mm/min; ASTM D 638
Tensile Modulus	11.5 GPa	1670 ksi	1 mm/min; ISO 527
	11.72 GPa	1700 ksi	5 mm/min; ASTM D 638
Flexural Yield Strength	240 MPa	34800 psi	2 mm/min; ISO 178
	254 MPa	36800 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	10.0 GPa	1450 ksi	2 mm/min; ISO 178
	11.43 GPa	1658 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	1.12 J/cm @Temperature 23.0 Â°C	2.10 ft-lb/in @Temperature 73.4 Â°F	ASTM D 256
	1.14 J/cm @Temperature -30.0 Â°C	2.14 ft-lb/in @Temperature -22.0 Â°F	ASTM D 256
Izod Impact, Unnotched	4.27 J/cm @Temperature 23.0 Â°C	8.00 ft-lb/in @Temperature 73.4 Â°F	ASTM D 4812
Izod Impact, Notched (ISO)	10.0 kJ/mÂ² @Temperature 23.0 Â°C	4.76 ft-lb/inÂ² @Temperature 73.4 Â°F	80*10*4; ISO 180/1A
	10.0 kJ/mÂ² @Temperature -30.0 Â°C	4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	80*10*4; ISO 180/1A
Charpy Impact, Notched	1.00 J/cmÂ² @Temperature 23.0 Â°C	4.76 ft-lb/inÂ² @Temperature 73.4 Â°F	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
Impact Test	18.0 J @Temperature 23.0 Â°C	13.3 ft-lb @Temperature 73.4 Â°F	Instrumented Impact Total Energy; ASTM D 3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	14.4 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	8.00 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -20.0 - 150 $\text{Å}^\circ\text{C}$	@Temperature -4.00 - 302 $\text{Å}^\circ\text{F}$	
	15.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	8.33 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
CTE, linear, Transverse to Flow	45.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	25.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	45.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	25.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	197 $\text{Å}^\circ\text{C}$	387 $\text{Å}^\circ\text{F}$	Flatw 80*10*4 sp=64mm; ISO 75/Af
	212 $\text{Å}^\circ\text{C}$	414 $\text{Å}^\circ\text{F}$	unannealed; ASTM D 648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Vicat Softening Point	214 $\text{Å}^\circ\text{C}$	417 $\text{Å}^\circ\text{F}$	Rate B/50; ISO 306
	215 $\text{Å}^\circ\text{C}$	419 $\text{Å}^\circ\text{F}$	Rate B/120; ISO 306
	234 $\text{Å}^\circ\text{C}$	453 $\text{Å}^\circ\text{F}$	Rate B/50; ASTM D 1525
Glass Transition Temp, Tg	217 $\text{Å}^\circ\text{C}$	423 $\text{Å}^\circ\text{F}$	
Oxygen Index	54 %	54 %	LOI; ASTM D 2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.50e+16 ohm-cm	1.50e+16 ohm-cm	ASTM D 257
Dielectric Constant	3.7	3.7	ASTM D 150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	24.0 kV/mm	610 kV/in	in oil; ASTM D 149
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Dissipation Factor	0.0020	0.0020	ASTM D 150
	@Frequency 1000 Hz	@Frequency 1000 Hz	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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