

## SABIC Innovative Plastics ULTEM UC1200 PEI (Asia Pacific)

Category : Polymer , Thermoplastic , Polyetherimide (PEI)

**Material Notes:**

12% carbon fiber reinforced Polyetherimide (Tg 217C). ECO Conforming. UL94 V0 listing in recognized colors.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-ULTEM-UC1200-PEI-Asia-Pacific.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-ULTEM-UC1200-PEI-Asia-Pacific.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.32 g/cc	1.32 g/cc	ASTM D792
Linear Mold Shrinkage, Flow	0.0012 - 0.0022 cm/cm @Thickness 3.20 mm	0.0012 - 0.0022 in/in @Thickness 0.126 in	SABIC Method
Linear Mold Shrinkage, Transverse	0.0030 - 0.0050 cm/cm @Thickness 3.20 mm	0.0030 - 0.0050 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	7.5 g/10 min @Load 6.60 kg, Temperature 337 Â°C	7.5 g/10 min @Load 14.6 lb, Temperature 639 Â°F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	131 MPa	19000 psi	Type I, 5 mm/min; ASTM D638
Tensile Strength, Yield	131 MPa	19000 psi	Type I, 5 mm/min; ASTM D638
Elongation at Break	5.1 %	5.1 %	Type I, 5 mm/min; ASTM D638
Elongation at Yield	5.1 %	5.1 %	Type I, 5 mm/min; ASTM D638
Tensile Modulus	8.13 GPa	1180 ksi	5 mm/min; ASTM D638
Flexural Strength	193 MPa	28000 psi	2.6 mm/min, 100 mm span; ASTM D790
	221 MPa	32100 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	7.83 GPa	1140 ksi	1.3 mm/min, 50 mm span; ASTM D790
	8.27 GPa	1200 ksi	2.6 mm/min, 100 mm span; ASTM D790
Izod Impact, Notched	0.370 J/cm	0.693 ft-lb/in	ASTM D256
Izod Impact, Unnotched	4.16 J/cm	7.79 ft-lb/in	ASTM D4812
Dart Drop, Total Energy	6.00 J	4.43 ft-lb	ASTM D3763

Mechanical Properties	@Temperature 23.0 Metric °C	@Temperature 73.4 °F English	Comments
-----------------------	-----------------------------------	---------------------------------	----------

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 -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	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 $\text{Å}^\circ\text{F}$	
CTE, linear, Transverse to Flow	32.4 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	18.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	39.6 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	22.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -20.0 - 150 $\text{Å}^\circ\text{C}$	@Temperature -4.00 - 302 $\text{Å}^\circ\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	213 $\text{Å}^\circ\text{C}$	415 $\text{Å}^\circ\text{F}$	unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	
Deflection Temperature at 1.8 MPa (264 psi)	208 $\text{Å}^\circ\text{C}$	406 $\text{Å}^\circ\text{F}$	unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	
	210 $\text{Å}^\circ\text{C}$	410 $\text{Å}^\circ\text{F}$	unannealed; ASTM D648
	@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; ASTM D1525
Glass Transition Temp, Tg	217 $\text{Å}^\circ\text{C}$	423 $\text{Å}^\circ\text{F}$	
UL RTI, Electrical	105 $\text{Å}^\circ\text{C}$	221 $\text{Å}^\circ\text{F}$	UL 746B
UL RTI, Mechanical with Impact	105 $\text{Å}^\circ\text{C}$	221 $\text{Å}^\circ\text{F}$	UL 746B
UL RTI, Mechanical without Impact	105 $\text{Å}^\circ\text{C}$	221 $\text{Å}^\circ\text{F}$	UL 746B
Flammability, UL94	V-0	V-0	UL 94
	@Thickness 1.57 mm	@Thickness 0.0618 in	

Electrical Properties	Metric	English	Comments
-----------------------	--------	---------	----------

Volume Resistivity	400 ohm-cm	400 ohm-cm	ASTM D257
Surface Resistance	200000 ohm	200000 ohm	ASTM D257
Static Decay	0.010 sec	0.010 sec	5000V to <50V; FTMS101B

Electrical Properties	Metric <sup>sec</sup>	English <sup>sec</sup>	Comments
High Amp Arc Ignition, HAI	30 - 60 arcs	30 - 60 arcs	UL 746A

## 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