

## Ultem\* Resin ATX100R

Americas: COMMERCIAL

Higher impact, high flow Polyetherimide blend with internal mold release. ECO Conforming, UL94 HB listing.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	68	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	80	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	106	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2530	MPa	ASTM D 790
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	2082	J/m	ASTM D 4812
Izod Impact, notched, 23°C	373	J/m	ASTM D 256
<b>THERMAL</b>			
HDT, 1.82 MPa, 6.4 mm, unannealed	157	°C	ASTM D 648
Relative Temp Index, Elec	115	°C	UL 746B
Relative Temp Index, Mech w/impact	115	°C	UL 746B
Relative Temp Index, Mech w/o impact	115	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.21	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 295°C/6.6 kgf	6.4	g/10 min	ASTM D 1238
<b>ELECTRICAL</b>			
Hot Wire Ignition {PLC}	1	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	3	PLC Code	UL 746A
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94HB Flame Class Rating (3)	0.76	mm	UL 94

Source GMD, last updated:01/11/2000

### Processing

Parameter	Value	Unit
<b>Injection Molding</b>		
Drying Temperature	135	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	12	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	330 - 355	°C
Nozzle Temperature	325 - 350	°C
Front - Zone 3 Temperature	330 - 355	°C
Middle - Zone 2 Temperature	320 - 345	°C
Rear - Zone 1 Temperature	310 - 330	°C
Mold Temperature	95 - 135	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	40 - 70	rpm

Shot to Cylinder Size	40 - 60	%
Vent Depth	0.025 - 0.076	mm

Source GMD, last updated:01/11/2000

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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