

Ultem* Resin SF2250

Asia Pacific: COMMERCIAL

High flow Ultem for thin wall application

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 5 mm/min	162	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3	%	ASTM D 638
Tensile Modulus, 5 mm/min	8900	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	197	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	7260	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	157	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3	%	ISO 527
Flexural Modulus, 2 mm/min	7150	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	89	J/m	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	9	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	203	°C	ASTM D 648
CTE, -40°C to 150°C, flow	1.4E-05	1/°C	ASTM E 831
CTE, -40°C to 150°C, xflow	5.4E-05	1/°C	ASTM E 831
CTE, 23°C to 150°C, flow	1.8E-05	1/°C	ISO 11359-2
CTE, 23°C to 150°C, xflow	5.9E-05	1/°C	ISO 11359-2
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	208	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.44	-	ASTM D 792
Moisture absorption (23°C/50%)	0.07	%	-
Mold Shrinkage, flow	0.46	%	SABIC Method
Mold Shrinkage, xflow	0.54	%	SABIC Method
Melt Flow Rate, 337°C/6.6 kgf	19.7	g/10 min	ASTM D 1238
Density	1.44	g/cm ³	ISO 1183
Water Absorption, 23°C/24hrs	0.2	%	ISO 62-1
Melt Volume Rate, MVR at 345°C/10.0 kg	40	cm ³ /10 min	ISO 1133
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Compliant, 94V-0 Flame Class Rating (3)(4)	1.5	mm	UL 94 by GE

Source GMD, last updated:05/23/2008

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	150	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	24	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	350 - 400	°C
Nozzle Temperature	345 - 400	°C

Front - Zone 3 Temperature	345 - 400	°C
Middle - Zone 2 Temperature	340 - 400	°C
Rear - Zone 1 Temperature	330 - 400	°C
Mold Temperature	135 - 165	°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:05/23/2008

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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