ULTEM™ 2312 resin

Polyether Imide

SABIC Innovative Plastics

Message:

30% Milled glass filled, enhanced flow Polyetherimide (Tg 217C). ECO Conforming, UL94 V0 and 5VA listing.

General Information			
Filler / Reinforcement	Glass fiber with embossing, 30% filler by weight		
Features	Comply with ECO Good liquidity		
Agency Ratings	EU Eco		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.51	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage			Internal method
Flow: 3.20mm	0.30 - 0.40	%	Internal method
Transverse flow: 3.20mm	0.45 - 0.55	%	Internal method
Water Absorption			ASTM D570
24 hr	0.18	%	ASTM D570
Equilibrium, 23°C	0.98	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [1]	6000	MPa	ASTM D638
Tensile Strength [2] (Break)	103	MPa	ASTM D638
Tensile Elongation [3] (Break)	3.5	%	ASTM D638
Flexural Modulus [4] (100 mm Span)	6550	MPa	ASTM D790
Flexural Strength [5] (Break, 100 mm Span)	179	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	32	J/m	ASTM D256
Reverse Notch Izod Impact (3.20 mm)	310	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)	208	°C	ASTM D648
Linear thermal expansion coefficient			ASTM E831
Flow: -20 to 150°C	2.3E-5	cm/cm/°C	ASTM E831
Lateral: -20 to 150°C	2.7E-5	cm/cm/°C	ASTM E831
RTI Elec	170	°C	UL 746
RTI Imp	170	°C	UL 746
RTI	170	°C	UL 746

Electrical	Nominal Value	Test Method
Dielectric Constant		ASTM D150
1 kHz	3.70	ASTM D150
1 MHz	3.49	ASTM D150
Arc Resistance [6]	PLC 7	ASTM D495
Comparative Tracking Index (CTI)	PLC 4	UL 746
High Amp Arc Ignition (HAI)	PLC 3	UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 0	UL 746
Hot-wire Ignition (HWI)	PLC 1	UL 746

Flammability	Nominal Value	Test Method
Flame Rating (0.813 mm)	V-0	UL 94

Injection	Nominal Value	Unit
Drying Temperature	149	°C
Drying Time	4.0 - 6.0	hr
Drying Time, Maximum	24	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 - 60	%
Rear Temperature	332 - 399	°C
Middle Temperature	338 - 399	°C
Front Temperature	343 - 399	°C
Nozzle Temperature	343 - 399	°C
Processing (Melt) Temp	349 - 399	°C
Mold Temperature	135 - 163	°C
Back Pressure	0.345 - 0.689	MPa
Screw Speed	40 - 70	rpm
Vent Depth	0.025 - 0.076	mm

NOTE	
1.	5.0 mm/min
2.	Type 1, 5.0 mm/min
3.	Type 1, 5.0 mm/min
4.	2.6 mm/min
5.	2.6 mm/min
6.	Tungsten electrode

Recommended distributors for this material

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