

ULTEM™ RESIN 2212EPR

REGION ASIA

DESCRIPTION

20% Milled glass filled, high flow Polyetherimide (Tg 217°C) with internal mold release and enhanced electroplatability. ECO Conforming, UL94 V0 and 5VA lising.

TYPICAL PROPERTY VALUES

Revision 20180905

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	107	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	107	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3	%	ASTM D 638
Tensile Modulus, 5 mm/min	5790	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	172	MPa	ASTM D 790
Flexural Stress, brk, 2.6 mm/min, 100 mm span	172	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	5510	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	5100	MPa	ASTM D 790
IMPACT			
Izod Impact, unnotched, 23°C	480	J/m	ASTM D 4812
Izod Impact, notched, 23°C	58	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	12	J	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	210	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	210	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	205	°C	ASTM D 648
HDT, 0.45 MPa, 6.4 mm, unannealed	212	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	207	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ASTM E 831
Relative Temp Index, Elec	105	°C	UL 746B
Relative Temp Index, Mech w/impact	105	°C	UL 746B
Relative Temp Index, Mech w/o impact	105	°C	UL 746B
PHYSICAL			
Specific Gravity	1.4	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 337°C/6.6 kgf	15	g/10 min	ASTM D 1238
ELECTRICAL			
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	1	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	4	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	4	PLC Code	UL 746A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Comparative Tracking Index (UL) {PLC}	4	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating	0.4	mm	UL 94

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