

ULTEM™ RESIN MD131A

REGION EUROPE

DESCRIPTION

Transparent, enhanced flow Polyetherimide (Tg 217C). US FDA and EU Food Contact compliant.

TYPICAL PROPERTY VALUES

Revision 20240314

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	110	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	70	%	ASTM D638
Tensile Modulus, 5 mm/min	3720	MPa	ASTM D638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	165	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	3720	MPa	ASTM D790
IMPACT			
Izod Impact, Reverse Notched, 3.2 mm	1922	J/m	ASTM D256
Gardner, 23°C	23	J	ASTM D3029
THERMAL			
HDT, 1.82 MPa, 6.4 mm, unannealed	198	°C	ASTM D648
Relative Temp Index, Elec	170	°C	UL 746B
Relative Temp Index, Mech w/impact	170	°C	UL 746B
Relative Temp Index, Mech w/o impact	170	°C	UL 746B
PHYSICAL			
Specific Gravity	1.36	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 337°C/6.6 kgf	16	g/10 min	ASTM D1238
ELECTRICAL			
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D495
Hot Wire Ignition {PLC}	1	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	3	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	4	PLC Code	UL 746A
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	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	40 – 60	%	
Vent Depth	0.025 – 0.076	mm	

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