ULTEM™ RESIN MD131C

REGION EUROPE

DESCRIPTION

ULTEM™ MD131C resin is an amorphous, transparent polyetherimide (PEI) plastic offering a glass transition temperature (Tg) of 217C. This material is RoHS compliant. It has US FDA and EU Food Contact approvals. ULTEM™ MD131C resin is an unreinforced general purpose grade offering high heat resistance, high strength and modulus and broad chemical resistance up to high temperatures.

TYPICAL PROPERTY VALUES

Revision 20190828

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	105	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Modulus, 1 mm/min	3200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	140	MPa	ISO 178
Flexural Modulus, 2 mm/min	3200	MPa	ISO 178
IMPACT			
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL			
Vicat Softening Temp, Rate A/50	210	°C	ISO 306
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
CTE, 23°C to 150°C, flow	5.E-05	1/°C	ISO 11359-2
CTE, 23°C to 150°C, xflow	5.E-05	1/°C	ISO 11359-2
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	195	°C	ISO 75/Be
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.5 – 0.7	%	SABIC method
Density	1.27	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	1.25	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.7	%	ISO 62
Melt Volume Rate, MVR at 360°C/5.0 kg	25	cm³/10 min	ISO 1133
INJECTION MOLDING			
Drying Temperature	150	°C	
Drying Time	4 – 6	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	370 – 410	°C	
Nozzle Temperature	350 – 405	°C	
Front - Zone 3 Temperature	360 – 415	°C	
Middle - Zone 2 Temperature	350 – 405	°C	
Rear - Zone 1 Temperature	340 – 395	°C	
Hopper Temperature	80 – 120	°C	
Mold Temperature	140 – 180	°C	

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