

ULTEM™ RESIN DU762

DESCRIPTION

Excellent chemical resistance polyetherimide (PEI) blend with enhanced ductility.

GENERAL INFORMATION	
Features	Chemical Resistance, High temperature resistance, Impact resistant
Fillers	Unreinforced
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Mobile Phone - Computer - Tablets

TYPICAL PROPERTY VALUES

Revision 20260424

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 50 mm/min	90	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	77	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6.9	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	30	%	ASTM D638
Tensile Modulus, 50 mm/min	3000	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	130	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2900	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	90	MPa	ISO 527
Tensile Stress, break, 50 mm/min	78	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6.9	%	ISO 527
Tensile Strain, break, 50 mm/min	30	%	ISO 527
Tensile Modulus, 1 mm/min	2850	MPa	ISO 527
Flexural Strength, 2 mm/min	128	MPa	ISO 178
Flexural Modulus, 2 mm/min	2920	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	90	J/m	ASTM D256
Izod Impact, unnotched, 23°C	2150	J/m	ASTM D4812
Izod Impact, notched 80*10*4 +23°C	9	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	137	kJ/m ²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	9.5	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	99	kJ/m ²	ISO 179/1eU
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	203	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	188	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	202	°C	ISO 75/Bf

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	186	°C	ISO 75 /Af
CTE, -40°C to 150°C, flow	53	1/°C	ASTM E83 1
CTE, -40°C to 150°C, xflow	56.5	1/°C	ASTM E83 1
CTE, -40°C to 150°C, flow	54	1/°C	ISO 11359-2
CTE, -40°C to 150°C, xflow	56	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	206	°C	ASTM D1525
Vicat Softening Temp, Rate B/120	207	°C	ASTM D1525
Vicat Softening Temp, Rate B/50	206	°C	ISO 306
Vicat Softening Temp, Rate B/120	207	°C	ISO 306
PHYSICAL ⁽¹⁾			
Specific Gravity	1.268	-	ASTM D792
Density	1.268	g/cm ³	ISO 1183
Melt Flow Rate			
337°C/6.7 kgf	8.4	g/10 min	ASTM D1238
Melt Volume Rate			
337°C/6.7 kg	7.3	cm ³ /10 min	ISO 1133
Moisture Absorption, (23°C/50% RH/24hrs)	0.08	%	ISO 62-4
Mold Shrinkage, flow ⁽²⁾	0.6 – 0.8	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	0.6 – 0.8	%	SABIC method
INJECTION MOLDING ⁽³⁾			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Drying Time (Cumulative)	24	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	370 – 400	°C	
Nozzle Temperature	370 – 400	°C	
Front - Zone 3 Temperature	375 – 400	°C	
Middle - Zone 2 Temperature	375 – 400	°C	
Rear - Zone 1 Temperature	370 – 400	°C	
Mold Temperature	150 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 60	rpm	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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