LNP™ THERMOCOMP™ COMPOUND EC006AQW

EC006AQW

DESCRIPTION

LNP* THERMOCOMP* EC006AQW is a compound based on Polyetherimide resin containing Carbon Fiber. Added features of this material include: Electrically Conductive. This grade has been pre-assessed and passed the material related tests from the ISO 10993 “Biological Evaluation of Medical Devices”.

TYPICAL PROPERTY VALUES

Revision 20191216

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	255	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.4	%	ASTM D 638
Tensile Modulus, 5 mm/min	29220	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	351	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	22200	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	257	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	27540	MPa	ISO 527
Flexural Stress	350	MPa	ISO 178
Flexural Modulus, 2 mm/min	23280	MPa	ISO 178
Compressive Strength	234	MPa	SABIC method
IMPACT			
Izod Impact, unnotched, 23°C	580	J/m	ASTM D 4812
Izod Impact, notched, 23°C	80	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	198	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	198	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.39	-	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.03 – 0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.1 – 0.6	%	ASTM D 955
Melt Flow Rate, 380°C/6.7 kgf	10	g/10 min	ASTM D 1238
INJECTION MOLDING			
Drying Temperature	120 – 150	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	380 – 400	°C	
Front - Zone 3 Temperature	380 – 400	°C	
Middle - Zone 2 Temperature	380 – 400	°C	
Rear - Zone 1 Temperature	380 – 400	°C	
Mold Temperature	165 – 180	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	50 – 100	rpm	
Injection Speed	40 – 70	mm/s	

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