

LNP* Thermocomp* Compound LCF62E

Americas: COMMERCIAL

LNP* Thermocomp* LCF62E is a compound based on Polyetheretherketone resin containing Carbon and Glass Fiber fillers. Added features of this material includes: Easy Molding.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 5 mm/min	203	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	0.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	62980	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	296	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	17340	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	196	MPa	ISO 527
Tensile Strain, break, 5 mm/min	0.7	%	ISO 527
Tensile Modulus, 1 mm/min	41090	MPa	ISO 527
Flexural Stress	391	MPa	ISO 178
Flexural Modulus, 2 mm/min	36490	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	711	J/m	ASTM D 4812
Izod Impact, notched, 23°C	80	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	17	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	47	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	290	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	290	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	290	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	290	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.57	-	ASTM D 792
Density	1.57	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.02	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.09 - 2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 - 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.02	%	ISO 62

Source GMD, last updated:06/19/2008

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.1	%
Melt Temperature	380 - 390	°C
Front - Zone 3 Temperature	380 - 395	°C

Middle - Zone 2 Temperature	365 - 375	°C
Rear - Zone 1 Temperature	350 - 360	°C
Mold Temperature	140 - 165	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

Source GMD, last updated:06/19/2008

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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