

Product Texts

LNP THERMOCOMP QFC0AI compound is based on Nylon 6/10 resin containing 50% glass fiber. Added feature of this material include: high modulus, high impact, low dielectric constant, low moisture absorption, good dimensional stability and good chemical resistance.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	56	cm ³ /10min	ISO 1133
Temperature	320	°C	-
Load	5	kg	-
ASTM Data			
Mold Shrinkage, MD	0.0027	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.0045	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	11600	MPa	ISO 527
Stress at break	165	MPa	ISO 527
Strain at break	3.8	%	ISO 527
Flexural modulus, 23°C	10300	MPa	ISO 178
Flexural strength	263	MPa	ISO 178
Charpy impact strength, +23°C	84	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	14.5	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	80	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	15	kJ/m ²	ISO 180/1A
Izod notched impact strength	14	kJ/m ²	ISO 180/1A
Temperature	-20	°C	-
ASTM Data			
Tensile Modulus	11500	MPa	ASTM D 638
Tensile Strength at Break	161	MPa	ASTM D 638
Elongation at Break	3.7	%	ASTM D 638
Flexural Modulus	10000	MPa	ASTM D 790
Flexural Strength	258	MPa	ASTM D 790
Izod Impact notched, 1/8 in	155	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	1260	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	205	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	220	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	16	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	80	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	20	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	95	E-6/K	ASTM D 696
DTUL @ 66 psi	218	°C	ASTM D 648
DTUL @ 264 psi	205	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.06	%	Sim. to ISO 62
Density	1430	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120 - 140	°C	-
Pre-drying - Time	3 - 4	h	-
Melt temperature	280 - 310	°C	-
Mold temperature	100 - 130	°C	-
Zone 1	270 - 290	°C	-
Zone 2	280 - 300	°C	-

Zone 3	290 - 310	°C	-
Nozzle temperature	290 - 310	°C	-
Screw speed	50 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

High impact or impact modified

Chemical Resistance

General Chemical Resistance

Applications

Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America