

Product Texts

LNP THERMOCOMP COMPOUND DC0051 is a compound based on Polycarbonate resin containing >20% Carbon Fiber. Added feature of this grade is: Flame Retardant.

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	19000	MPa	ISO 527
Stress at break	165	MPa	ISO 527
Strain at break	1.7	%	ISO 527
Flexural modulus, 23°C	17000	MPa	ISO 178
Flexural strength	214	MPa	ISO 178
Charpy impact strength, +23°C	21	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	22	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	5	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	22	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	6	kJ/m ²	ISO 180/1A
Izod notched impact strength Temperature	5 -30	kJ/m ² °C	ISO 180/1A -
ASTM Data			
Tensile Modulus	18400	MPa	ASTM D 638
Tensile Strength at Break	155	MPa	ASTM D 638
Elongation at Break	1.8	%	ASTM D 638
Flexural Modulus	17100	MPa	ASTM D 790
Flexural Strength	215	MPa	ASTM D 790
Izod Impact notched, 1/8 in	50	J/m	ASTM D 256
Izod Impact notched, Low-Temperature Temperature	44 -30	J/m °C	ASTM D 256 -
Izod Impact unnotched, 1/8 in	318	J/m	ASTM D 256
Thermal properties			
ISO Data			
Temp. of deflection under load, 1.80 MPa	97	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	103	°C	ISO 75-1/-2
Vicat softening temperature, B	103	°C	ISO 306
Coeff. of linear therm. expansion, parallel	73	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	74	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h Thickness tested	V-0 0.8	class mm	IEC 60695-11-10 -
Yellow Card available	yes	-	-
ASTM Data			
Coefficient of Thermal Expansion, MD	72	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	71	E-6/K	ASTM D 696
DTUL @ 66 psi	101	°C	ASTM D 648
DTUL @ 264 psi	96	°C	ASTM D 648
Electrical properties			
ASTM Data			
Surface Resistivity	1E8	Ohm	ASTM D 257
Volume Resistivity	1E10	Ohm*cm	ASTM D 257
Other properties			
Density	1310	kg/m ³	ASTM D 792
Processing Recommendation Injection Molding			
Pre-drying - Temperature	70	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	275 - 330	°C	-

Mold temperature	60 - 85	°C	-
Zone 1	260 - 300	°C	-
Zone 2	270 - 310	°C	-
Zone 3	280 - 320	°C	-
Screw speed	30 - 63	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant, Halogen-free

Features

Ductile

Applications

Electrical and Electronical

Regional Availability

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