

Product Texts

LNP THERMOCOMP D451 compound is based on Polycarbonate (PC) resin containing 40% glass fiber. Added features of this grade include: High Modulus, Low Warpage, Good Ductility, Non-Brominated & Non-Chlorinated Flame Retardant.

UL Yellow Card Link [E207780-101265025](https://www.ul.com/yellow-card/E207780-101265025)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	14	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	57	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-
Mold Shrinkage, MD	0.175	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.175	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Charpy impact strength, +23°C	33	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	13	kJ/m ²	ISO 179/1eA
ASTM Data			
Tensile Modulus	11720	MPa	ASTM D 638
Tensile Strength at Break	143	MPa	ASTM D 638
Elongation at Break	2.3	%	ASTM D 638
Flexural Modulus	9750	MPa	ASTM D 790
Izod Impact notched, 1/8 in	140	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	521	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	0.6	mm	-
ASTM Data			
DTUL @ 264 psi	114	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1520	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	110	°C	-
Pre-drying - Time	3 - 6	h	-
Processing humidity	≤0.02	%	-
Melt temperature	285 - 310	°C	-
Mold temperature	80 - 110	°C	-
Zone 1	260 - 280	°C	-
Zone 2	270 - 290	°C	-
Zone 3	280 - 300	°C	-
Screw speed	50 - 90	rpm	-
Back pressure	0.1 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant

Additives

Flame retarding agent

Regional Availability

North America, Europe, Asia Pacific