

Product Texts

LNP THERMOCOMP D251 compound is based on Polycarbonate (PC) resin containing 20% glass fiber. Added features of this grade include: High Modulus, Low Warpage, Good Ductility, Non-Brominated & Non-Chlorinated Flame Retardant.

UL Yellow Card Link [E207780-102099701](https://www.ul.com/yellow-card/E207780-102099701)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	20	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	24	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.3	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.3	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6800	MPa	ISO 527
Stress at break	112	MPa	ISO 527
Strain at break	2.6	%	ISO 527
Flexural modulus	6240	MPa	ISO 178
Charpy impact strength, +23°C	59	kJ/m ²	ISO 179/1eU
Charpy impact strength, +23°C, 3mm	55	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	67	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	14	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, +23°C, 3mm	15	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	10	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	48	kJ/m ²	ISO 180/1U
Izod impact strength, +23°C, 4mm	48	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	56	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	13	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	9	kJ/m ²	ISO 180/1A
Izod notched impact strength, +23°C, 3mm	13	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	9	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	6680	MPa	ASTM D 638
Tensile Strength at Break	110	MPa	ASTM D 638
Elongation at Break	2.7	%	ASTM D 638
Flexural Modulus	6150	MPa	ASTM D 790
Izod Impact notched, 1/8 in	150	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	715	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	117	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	121	°C	ISO 75-1/-2
Vicat softening temperature, A	131	°C	ISO 306
Vicat softening temperature, B	123	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	125	°C	ISO 306
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	0.3	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
DTUL @ 66 psi	121	°C	ASTM D 648
DTUL @ 264 psi	116	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ISO Data			
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	40	kV/mm	IEC 60243-1
Comparative tracking index	200	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	0.07	%	Sim. to ISO 62
Humidity absorption	0.03	%	Sim. to ISO 62
Density	1350	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

Additives

Flame retarding agent

Special Characteristics

Flame retardant

Regional Availability

North America, Europe, Asia Pacific