

Product Texts

LNP THERMOCOMP D251RC compound is based on recycled 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. Post-Consumer Recycling (PCR) Polycarbonate content up to 35%.

UL Yellow Card Link [E207780-103127360](https://www.ul.com/yellowcard/E207780-103127360)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	21	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	25	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	6650	MPa	ISO 527
Stress at break	107	MPa	ISO 527
Strain at break	2.6	%	ISO 527
Flexural modulus	6150	MPa	ISO 178
Izod impact strength, +23°C, 4mm	41	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
ASTM Data			
Tensile Modulus	6700	MPa	ASTM D 638
Tensile Strength at Break	109	MPa	ASTM D 638
Elongation at Break	2.6	%	ASTM D 638
Flexural Modulus	6050	MPa	ASTM D 790
Izod Impact notched, 1/8 in	140	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	90	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	680	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	116	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	121	°C	ISO 75-1/-2
Vicat softening temperature, B	122	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	125	°C	ISO 306
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	0.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	850	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	850	°C	IEC 60695-2-13
GWIT - thickness tested (2)	2	mm	-
ASTM Data			
DTUL @ 66 psi	120	°C	ASTM D 648
DTUL @ 264 psi	115	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	>1E15	Ohm	ASTM D 257

LNP™ THERMOCOMP™ Compound D251RC

PC-GF20

Saudi Basic Industries Corporation (SABIC)

Volume Resistivity	>1E15	Ohm*cm	ASTM D 257
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Other properties	Value	Unit	Test Standard
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

Certifications

Recycled Resin Content

Regional Availability

North America, Europe, Asia Pacific