

Product Texts

LNP THERMOCOMP D452 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, High Flow, IMR/IMD Capability.

UL Yellow Card Link [E207780-101549550](https://www.ulprospector.com/PC/properties/101549550)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	30	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	39	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	2.16	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			
Tensile Modulus	11300	MPa	ISO 527
Stress at break	140	MPa	ISO 527
Strain at break	2.2	%	ISO 527
Flexural modulus	10100	MPa	ISO 178
Charpy impact strength, +23°C	41	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	13	kJ/m ²	ISO 179/1eA
ASTM Data			
Tensile Modulus	11960	MPa	ASTM D 638
Tensile Strength at Break	141	MPa	ASTM D 638
Elongation at Break	2.3	%	ASTM D 638
Flexural Modulus	11660	MPa	ASTM D 790
Izod Impact notched, 1/8 in	145	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	620	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	1.0	mm	-
ASTM Data			
DTUL @ 264 psi	98	°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	90 - 100	°C	-
Pre-drying - Time	3 - 5	h	-
Melt temperature	295 - 315	°C	-
Mold temperature	70 - 95	°C	-
Zone 1	270 - 295	°C	-
Zone 2	280 - 305	°C	-
Zone 3	295 - 315	°C	-
Screw speed	20 - 100	rpm	-
Back pressure	0.3 - 1	MPa	-

Characteristics

LNP™ THERMOCOMP™ Compound D452

PC-GF40

Saudi Basic Industries Corporation (SABIC)

Processing

Injection Molding

Special Characteristics

Flame retardant

Additives

Flame retarding agent

Regional Availability

North America, Europe, Asia Pacific