

LNP™ THERMOCOMP™ Compound DC0041PQ

PC-CF20

Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP DC0041PQ compound is based on Polycarbonate (PC) resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive, Non-Brominated, Non-Chlorinated Flame Retardant, Exceptional Processing.

UL Yellow Card Link [E121562-101712652](https://www.ul.com/yellowcard/E121562-101712652)

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.1	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.36	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	21000	MPa	ASTM D 638
Tensile Strength at Break	185	MPa	ASTM D 638
Elongation at Break	1.5	%	ASTM D 638
Flexural Modulus	18000	MPa	ASTM D 790
Izod Impact notched, 1/8 in	70	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	500	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	0.7	mm	-
ASTM Data			
Coefficient of Thermal Expansion, MD	14	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	34.9	E-6/K	ASTM D 696
DTUL @ 264 psi	86	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	1.4E6	Ohm	ASTM D 257
Volume Resistivity	3.19E6	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1320	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	70	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.05	%	-
Melt temperature	275 - 300	°C	-
Mold temperature	60 - 85	°C	-
Zone 1	260 - 280	°C	-
Zone 2	270 - 290	°C	-
Zone 3	280 - 300	°C	-
Screw speed	30 - 63	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Increased electrical conductivity, Flame retardant

Additives

Flame retarding agent

Regional Availability

North America, Europe, Asia Pacific