LNP™ THERMOCOMP™ Compound DC0041PE

PC-CF | Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP COMPOUND DC0041PE is a compound based on Polycarbonate resin containing Carbon Fiber. Added feature of this grade is: Flame Retardant, PCR content up to 30%

UL Yellow Card E207780-104237180

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.0006**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.001**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**18500**	MPa	ISO 527
Stress at break	**167**	MPa	ISO 527
Strain at break	**2**	%	ISO 527
Flexural modulus, 23°C	**16800**	MPa	ISO 178
Flexural strength	**214**	MPa	ISO 178
Charpy impact strength, +23°C	**31**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**36**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**8**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**7**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**31**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**7**	kJ/m²	ISO 180/1A
Izod notched impact strength	**7**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
ASTM Data			
Tensile Modulus	**18100**	MPa	ASTM D 638
Tensile Strength at Break	**165**	MPa	ASTM D 638
Elongation at Break	**1.4**	%	ASTM D 638
Flexural Modulus	**16600**	MPa	ASTM D 790
Flexural Strength	**223**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**57**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**50**	J/m	ASTM D 256
Temperature	**-30**	°C	-
Izod Impact unnotched, 1/8 in	**380**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**101**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**108**	°C	ISO 75-1/-2
Vicat softening temperature, B	**108**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**6.3**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**68**	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-
Yellow Card available	**yes**	-	-
ASTM Data			
Coefficient of Thermal Expansion, MD	**6.9**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**68**	E-6/K	ASTM D 696
DTUL @ 66 psi	**106**	°C	ASTM D 648
DTUL @ 264 psi	**100**	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	**1000000**	Ohm	ASTM D 257
Volume Resistivity	**1000000**	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	**1290**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**70**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**275 - 330**	°C	-
Mold temperature	**60 - 85**	°C	-
Zone 1	**260 - 300**	°C	-
Zone 2	**270 - 310**	°C	-
Zone 3	**280 - 320**	°C	-
Screw speed	**30 - 63**	rpm	-
Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
Flame retardant

Certifications
Recycled Resin Content

Applications
IT / Business Machine, Electrical and Electronical

Regional Availability
North America, Europe, Asia Pacific, South and Central America