LNP™ THERMOCOMP™ Compound D10001VI

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP D10001VI is based on Polycarbonate (PC) resin. It is colorable, non Chlorinated and non Brominated, UL94 V0@0.8mm LDS compound for antenna or electric circuit manufacturing. Added features of this material include good process-ability, high impact strength, robust flame retardant for thin-wall design, good colorability.

UL Yellow Card Link: E207780-103685620

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**20**	cm³/10min	ISO 1133
Temperature	**260**	°C	-
Load	**5**	kg	-
ASTM Data			
Mold Shrinkage, MD	**0.0065**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.0065**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2600**	MPa	ISO 527
Stress at break	**40**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus, 23°C	**2600**	MPa	ISO 178
Flexural strength	**90**	MPa	ISO 178
Charpy impact strength, +23°C	**95**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**15**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**130**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**15**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**2550**	MPa	ASTM D 638
Tensile Strength at Break	**50**	MPa	ASTM D 638
Elongation at Break	**70**	%	ASTM D 638
Flexural Modulus	**2550**	MPa	ASTM D 790
Flexural Strength	**90**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**650**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**2150**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**104**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**116**	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**64**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**72**	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			
UL 94 Flame rating	**V-0**	-	UL 94
Thickness tested	**0.8**	mm	-
Coefficient of Thermal Expansion, MD	**62**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**70**	E-6/K	ASTM D 696
DTUL @ 66 psi	**117**	°C	ASTM D 648
DTUL @ 264 psi	**105**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	**1300**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**4**	h	-

Melt temperature	**270 - 290**	°C	-
Mold temperature	**100 - 130**	°C	-
Zone 1	**265 - 290**	°C	-
Zone 2	**265 - 290**	°C	-
Zone 3	**265 - 290**	°C	-
Nozzle temperature	**265 - 290**	°C	-

Characteristics

Processing
Injection Molding

Applications
IT / Business Machine, Electrical and Electronical

Special Characteristics
Flame retardant, Halogen-free, High impact or impact modified

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