

LNPTTM THERMOCOMPTM COMPOUND DF0049

DF-1004 FR

DESCRIPTION

LNP THERMOCOMP DF0049 compound is based on Polycarbonate (PC) resin containing 20% glass fiber. Added features of this grade include: Flame Retardant.

GENERAL INFORMATION	
Features	Flame Retardant, High stiffness/Strength
Fillers	Glass Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Personal Accessory
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	103	MPa	ASTM D638
Tensile Strain, break	2.8	%	ASTM D638
Tensile Modulus, 50 mm/min	6620	MPa	ASTM D638
Flexural Stress	172	MPa	ASTM D790
Flexural Modulus	6590	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	818	J/m	ASTM D4812
Izod Impact, notched, 23°C	96	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	143	°C	ASTM D648
CTE, -40°C to 40°C, flow	2.52E-05	1/°C	ASTM E831
ELECTRICAL ⁽¹⁾			
Comparative Tracking Index (UL) {PLC} ⁽²⁾	3	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 1 ⁽²⁾	≥1.6	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 4 ⁽²⁾	≥1.6	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 2 ⁽²⁾	≥3.0	mm	UL 746A
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	<u>E121562-101377970</u>	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.6	mm	UL 94

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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