

LNPTM THERMOCOMPTM COMPOUND RX10405H

RX10405H

DESCRIPTION

LNP THERMOCOMP RX10405H compound is based on Nylon 6/6 resin containing 40% carbon fiber. Added features of this grade include: Electrically Conductive, Healthcare.

GENERAL INFORMATION	
Features	Electrically Conductive, Healthcare/Formula lock, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Hygiene and Healthcare	Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	276	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.6	%	ASTM D638
Tensile Modulus, 5 mm/min	31000	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	386	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	24400	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	101	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	256	°C	ASTM D648
PHYSICAL ⁽¹⁾			
Specific Gravity	1.33	-	ASTM D792
ELECTRICAL ⁽¹⁾			
Surface Resistivity	1.E+02	Ω	ASTM D257
INJECTION MOLDING ⁽²⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Temperature	95 – 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) 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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