

LNPTM STAT-KONTM COMPOUND PFD06

PF-30

DESCRIPTION

Industrial

LNP STAT-KON PFD06 compound is based on Nylon 6 resin containing conductive carbon powder and 30% glass fiber. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber, Carbon Powder
Polymer Types	Polyamide 6 (Nylon 6)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components

Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL (1)			
Tensile Stress, break	159	MPa	ASTM D638
Tensile Strain, break	2.3	%	ASTM D638
Tensile Modulus, 50 mm/min	11720	MPa	ASTM D638
Flexural Stress	241	MPa	ASTM D790
Flexural Modulus	11030	MPa	ASTM D790
IMPACT (1)			
Izod Impact, unnotched, 23°C	907	J/m	ASTM D4812
Izod Impact, notched, 23°C	106	J/m	ASTM D256
THERMAL (1)			
HDT, 1.82 MPa, 3.2mm, unannealed	206	°C	ASTM D648
PHYSICAL (1)			
Density	1.43	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.5	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.2	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.38	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.15	%	ISO 294
Moisture Absorption (23°C / 50% RH)	0.91	%	ISO 62
ELECTRICAL (1)			
Volume Resistivity (3)	1.E+03	$\Omega.$ cm	ASTM D257
Surface Resistivity (3)	1.E+01 – 1.E+06	Ω	ASTM D257



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS	
INJECTION MOLDING (4)				
Drying Temperature	80	°C		
Drying Time	4	Hrs		
Maximum Moisture Content	0.15 – 0.25	%		
Melt Temperature	265 – 275	°C		
Front - Zone 3 Temperature	275 – 290	°C		
Middle - Zone 2 Temperature	265 – 275	°C		
Rear - Zone 1 Temperature	250 – 260	°C		
Mold Temperature	80 – 95	°C		
Back Pressure	0.3 – 0.7	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) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) Measurement meets requirements as specified in ASTM D4496.
- (4) 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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