

LNPT[™] THERMOCOMP[™] AM COMPOUND JC004XXAR1

DESCRIPTION

LNPT THERMOCOMP AM JC004XXAR1 is a compound based on PESU (Polyethersulfone) resin containing 20% carbon fiber for Large Format Additive manufacturing (LFAM) applications needing an inherent FR, reinforcement, and a high heat amorphous solution.

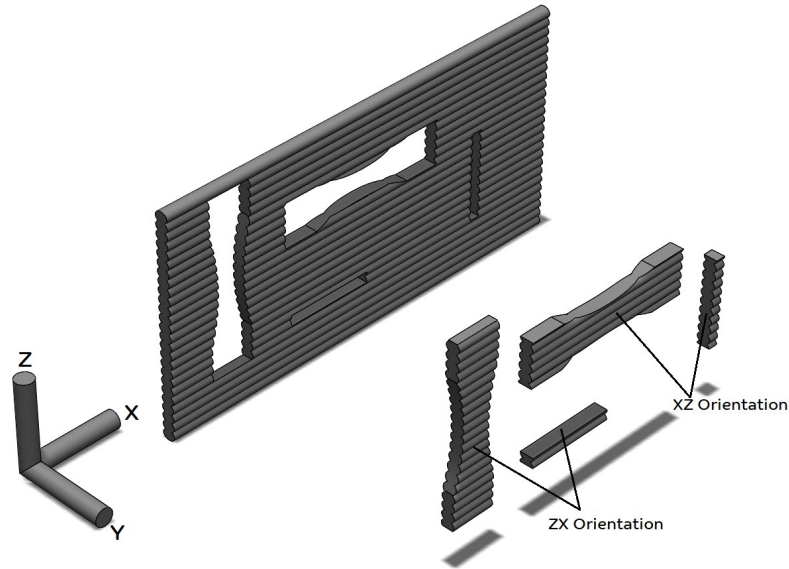
TYPICAL PROPERTY VALUES

Revision 20240209

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, 5mm/min ⁽¹⁾			
XZ Orientation	84	MPa	ASTM D638 Modified
ZX Orientation	23	MPa	ASTM D638 Modified
Tensile Strain, 5mm/min			
XZ Orientation	1.4	%	ASTM D638 Modified
ZX Orientation	1.2	%	ASTM D638 Modified
Tensile Stiffness, 5mm/min			
XZ Orientation ⁽²⁾	7.8	GPa	ASTM D638 Modified
ZX Orientation	2.2	GPa	ASTM D638 Modified
Flexural Stress, 5mm/min			
XZ Orientation	37	MPa	ASTM D790 Modified
ZX Orientation	103	MPa	ASTM D790 Modified
THERMAL			
HDT, 1.82 MPa, 3.2mm, annealed	214	°C	ASTM D648
PHYSICAL			
Specific Gravity	1.43	-	ASTM D792
EXTRUSION			
Extruder L/D	24	-	
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Barrel - Zone 1 Temperature	300 – 330	°C	
Barrel - Zone 2 Temperature	325 – 355	°C	
Barrel - Zone 3 Temperature	335 – 365	°C	
Barrel - Zone 4 Temperature	345 – 375	°C	
Nozzle Temperature	345 – 375	°C	
Melt Temperature	345 – 375	°C	
Bed Temperature	120 – 150	°C	
Extruder Pressure	<17	MPa	

(1) Modified ASTM E8 used for tensile test samples

(2) Tensile Stiffness (K) is structural property defined as the stress/strain in the linear region of the stress-strain curve. Value depends on the geometry/shape and boundary/surrounding conditions



ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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