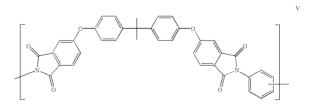




# CF-PEI JNM0803

# **PEI CARBON FIBERS**



#### APPLICATIONS

Technical material for skilled industrial use only.
A high performance printer with enclosure is advised.

The NANOVIA CF-PEI reference JNM0803 is a high performance PEI Carbon Fibers composite material.

Based on highly stable PolyEtherlmide (PEI) chemical backbone, JNM 0803 is a unique carbon alloy of the hight temperature polymers family that incorporates distinctive structural features and allow for exceptional possibilities in the control of 3D printability. The JNM 0803 reference represents the pseudo-amorphous products of the NANOVIA composite family, offering the lowest melting point and the slowest crystallization behavior, while keeping Tg close to 180°C. These properties lead to produce material with Resistance, rigidity / high temperature / chemical Resistance and resistance to fire.

# **PROPERTIES**

3D	PR	INT	NG
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Diameter	1.75 / 2.85	mm
	50	mm/s
Printing Speed	30	mm/s first layer
Nozzle	>0.5	mm
Plate Temp.	>120	°C
Extrusion Temp.	390	°C.
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\*Test must be performed to optimize the printing temperature depending on the 3D printer configuration.

### **GENERAL**

Density	1.26	@ 23°C ISO 1183
Water Abs.	1.25	%
Moist. Abs.	0.7	%

# **MECHANICAL**

Tensile Modulus	4685	MPa (Iso 527)
Flexural Modulus	4950	MPa (Iso 527)
Elong. @ break	3.50	%

### **THERMAL**

Melting point	370°C	
VICAT rate A/50	>215 °C	
Flammability rating	V-0	@ 3mm UL 94
HDT 0.45MPa	>200°C	Iso75Be

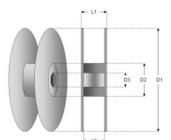
# **HEALTH & SAFETY**

Material not hazardous for health in itself. However, as dust, in case of peeling or sanding, dust may cause skin, eyes and respiratory tract irritation. Users must wear individual protection equipment (mask, gloves...) in case of sanding or milling the printed pieces. Consult MSDS for more data. Always refers to MSDS prior handling.

# NOTE

Typical properties must be verified by the end user on final articles. RoHS compliant material. This material complies with FDA 21 CFR 177. JNM0803 is rated ISO 10993 and fit automotive specifications ASTM D6394 SP0112.

#### PACKAGING



		•	- L2 →		
Spool	L1	L2	D1	D2	D3
500 g	55	45	200	105	52
750 g	55	45	200	105	52
1.0 kg	67	59	200	105	52
2.5 kg	100	90	300	210	52

Spools packed in individual boxes, under vacuum with desiccant. Product supplied with batch number and material traceability. Other spools are available on request (up to 25 kg).

#### CONTACT



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