

# Technical Data Sheet Ficha de Seguridad

SAKATA 3D PET-G CF15 filament is a PET-G compound reinforced with 15% special Carbon Fibers (CF) and heat stabilized with improved mechanical properties, abrasion resistance and specially developed for 3D FDM/FFF printers. Its main characteristics are improved stiffness, high mechanical properties, and abrasion resistance. It also shows a good adherence between layers and low shrinkage when printing. It can be easily printed in open and/or enclosed printers. Made in Spain by POLIMERSIA GLOBAL S.L.

FILAMENT SPECIFICATIONS	Unit	Value
Diameter	mm	1.75 ± 0.03
Max. roundness deviation	mm	0.03
Net weight	g	1,000

PHYSICAL PROPERTIES	Standard	Unit	Value
Density	ISO 1183	g/cm³	1.40
MECHANICAL PROPERTIES	Standard	Unit	Value
Tensile modulus	ISO 527	MPa	6,500
Tensile strength	ISO 527	MPa	90
Elongation at break	ISO 527	%	3
Flexural modulus	ISO 178	MPa	6,200
Flexural strength	ISO 178	MPa	115
Charpy unnotched impact strength	ISO 179	KJ/m <sup>2</sup>	55
Charpy notched impact strength	ISO 179	KJ/m <sup>2</sup>	5
THERMAL PROPERTIES	Standard	Unit	Value
HDT (0.45 MPa)	ISO 75	ōС	70
HDT (1.8 MPa)	ISO 75	ōС	60

PRINT SETTINGS	Unit	Value
Type of printer	-	Open or enclosed
Nozzle temp.	ōC.	235 - 265
Type of nozzle	-	Hardened steel
Bed temp.	ōC.	> 60
Type of bed	-	Glass or PEI
Fan speed	%	40 - 60
Layer height	mm	0.02
Print speed	mm/s	40 - 100
Material flow	%	96 - 98
Dry specification	Before printing	4 - 6 hours at 60 ºC (drybox)
	During printing	60 ºC (drybox) - optional

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### **Certifications / Approvals**

SAKATA 3D PET-G CF15 filament is not certified for food contact either medical applications.

#### **Safety Considerations**

Good general ventilation of the workplace is recommended.

### Disclaimer

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