

Main features

Low warpage

Impact resistance

Low water absorption

High-strength and stiffness parts with low creep

Physical properties	Test method	Specimen	Units	Typical value
Specific gravity	ISO 1183		g/cm ³	1.40
Water absorption	ISO 62		%	<0.3

Mechanical Properties at 23°C

Tensile strength	ISO 527		MPa	80
Tensile modulus				
Impact strength	ISO 179 1eU		kJ/m ²	40
Impact strength notched				
Flexural modulus	ISO 178		GPa	8
Flexural strength	ISO 178		MPa	130
Flexural elongation F. max.	ISO 178		%	3.50
Elongation F. max.	ISO 527		%	2.50

Thermal properties

Heat distortion temperature

Continuous service temperature

Electrical properties

Insulation resistance

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Material DataSheet CA PET

TDS Nr.: 5017

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SUGGESTED PRINT SETS (1)

Suggest print sets	Unit	Value	Test method
Extruder temp	C°	230-250	Internal
Plate temp	C°	30 - 60	Internal
Min. nozzle diameter (2)	mm.	0,5	Internal
Fan	%	0	Internal
Print speed	mm/l°	40	Internal

ADDITIONAL INFORMATIONS

In general filaments made with CA PET (pet carbon) can be processed on conventional 3D printer using FDM / FFF technology.

CA PET is a pet carbon fiber reinforced developed for 3D printing and to obtain best results we recommend pre drying the filaments at 120° for 4-6 h. Increase drying time for spools up 1 kg.

Don't leave the filament stopped inside the nozzle more than 20 min. If that down the temperature under 210°, better stop the thermal control.

(1) Suggested print set merely represent a recommendation for general use . Every printer necessity a specific set , nozzle temp, bed temp, etc .

(2) 0.5 mm is the minimum diameter of the nozzle with carbon fibers reinforced. Carbon fibers are abrasive, we suggest to use a nozzle in hardened or tempered metal, like Widia, or wear resistance internal surface, like ceramics or other.
NO tefloned surface!

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