



Material DataSheet
F.R.A.N.C. V0-TEMP

TDS Nr.: 5028

Rev. 3.0 25/03/2025

F.R.A.N.C. V0-TEMP
Fire Resistance ABS-PC Not Chrome
PC-ABS advanced resin meets the requirements of
EN 45545-2, R22, R23, HL1, HL2

Main features

Low warpage

Impact resistance

Low water absorption

High-strength and stiffness parts with low creep

Physical properties

Physical properties	Test method	Specimen	Units	Typical value
Specific gravity	ISO 1183		g/cm ³	1.18
Water absorption				

Mechanical Properties at 23°C

Tensile strength

Tensile modulus	ISO 527-2/1		MPa	2700
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Impact strength

Impact strength notched	ISO 180/A		Kj/m ²	44
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Flexurtal modulus	ISO 178		MPa	2750
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Flexurtal strength

Flexural elongation F. max.

Elongation F. max.

Thermal properties

Heat distortion temperature	ISO 75/2A		°C	86
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Continuous service temperature

Disclaimer

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Electrical properties

Relative Permittivity 100Hz		IEC60250			3.2
Relative Permittivity 1MHz		IEC60250			3.1
Dissipation Factor 100Hz		IEC60250			5.0E-03
Dissipation Factor 1MHz		IEC60250			7.0E-03
Surface Resistivity		IEC60093		Ohms	1.0E+16
Volume Resistivity		IEC60093		Ohm-cm	1.0E+16
Dielectric Strength		IEC60243		kV/mm	30
Comparative Tracking Index		IEC60112		V	300

Flammability

Classification at 1.5mm		UL94		-	V0
Classification at 2mm		UL94		-	5VB
Classification at 3mm		UL94		-	5VA
Glow Wire Index		IEC60695-2-12		°C	960
Limiting Oxygen Index		ISO 4589-2		%	32

SUGGESTED PRINT SETS (/)

Suggest print sets	Unit	Value	Test method
Extruder temp	C°	260-280	Internal
Plate temp	C°	90 - 110	Internal
Min. nozzle diameter	mm.	0,4	Internal
Fan	%	0 - 20	Internal
Print speed	mm/l°	25 - 35	Internal

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ADDITIONAL INFORMATION

In general filaments made with F.R.A.N.C. V0-TEMP (PC-ABS) can be processed on conventional 3D printer using FDM / FFF technology.

F.R.A.N.C. V0-TEMP (PC-ABS) is a 50/50 polymer alloy developed for 3D printing and to obtain best results we recommend pre drying the filaments at 80°-100° for 3/4 h. Increase drying time for spools up 1kg.

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.

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

Declaration of conformity

We hereby certify that the product F.R.A.N.C. V0 can meet the requirements of certifications :

DIN VDE 0472/Part 815 as Halogen free

Certified UL94 V0 at 1.5 mm. and 5VA at 3.0 mm.

EN 45545-2 - R22 - R23 - HL1 - HL2

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