PC/ABS FR V0

MATERIAL PROPERTIES

Specific Gravity	1.17 g/cm³	ISO 1183

Mechanical properties

Charpy impact strength, unnotched		
unnotched, –30°C	NB	ISO 179
unnotched, 23°C	NB	ISO 179
Notched Izod Impact Strength (23°C)	35 kJ/m²	ISO 180/4A
Tensile Strain (Yield)	4%	ISO 527-2/50
Tensile Strain (Break)	>50%	ISO 527-2/50
Tensile Modulus	2850 MPa	ISO 527-2/1
Tensile Stress (Yield)	60 MPa	ISO 527-2/50
Flexural Stress	110 MPa	ISO 178

Thermal properties

VICAT Softening point	104°C	ISO 306
Heat Deflection Temperature		
1.8 MPa	90°C	ISO 75-2/A

Electrical properties

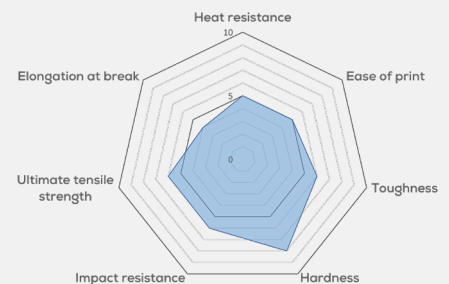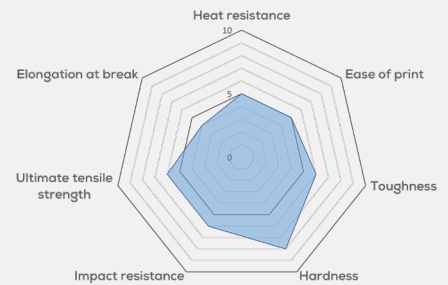|		
Surface resistivity	> 1.0E+15 ohms	IEC 60093
Volume resistivity	> 1.0E+15 ohms•cm	ASTM D257
Flammability		
Flame Rating		UL 94
1.5mm	V-0	
3.0mm	V-0	
Glow Wire Flammability Index		IEC 60695-2-12
1.5mm	960°C	
3.0mm	960°C	
Glow Wire Ignition Temperature		IEC 60695-2-13
1.5mm	750°C	
3.0mm	725°C	

DESCRIPTION

PC/ABS FR V0 is a professional, halogen-free filament for 3D printers. It is designed to meet UL-94 V0 flammability standards, which means it is self-extinguishing and meets the highest fire safety standards.

FEAUTURES

- Flame-retardant (UL-94 V0)
- Halogen-free
- Excellent interlayer adhesion
- Stable printing process
- High gloss surface

STORAGE AND SHELF LIFE

Filament should be stored in a dry room at room temperature. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months.

SUPPORT

If you have any questions or experience any issues, please do not hesitate to contact us at **support@spectrumfilaments.com**

PC/ABS FR V0

GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	240 - 265°C
Bed temperature	90 - 110°C
Active cooling fan	0 - 25%
Layer height**	0.05 - 0.3 mm
Shell thickness**	0.4 - 2.7 mm
Print speed**	40 - 300 mm/s
Closed chamber	recommended for larger prints
Dry box	not necessary
Ruby or hardened nozzle	not necessary

* settings are based on a 0.5mm nozzle
** depending on the geometrical complexity

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