

PC/ABS FR V0

MATERIAL PROPERTIES

Specific Gravity	1.17 g/cm ³	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/m ²	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		
1.5mm	960°C	
3.0mm	960°C	
Glow Wire Ignition Temperature		
1.5mm	750°C	
3.0mm	725°C	

DESCRIPTION

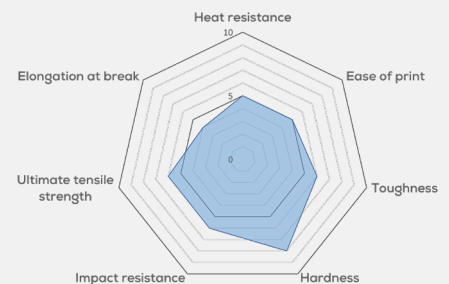
PC/ABS FR V0 is a professional, halogen-free filament for 3D printers. It is designed to meet UL-94 V0 flammability standards, which means it is self-extinguishing and meets the highest fire safety standards.

FEATURES

- 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

DESCRIPTION

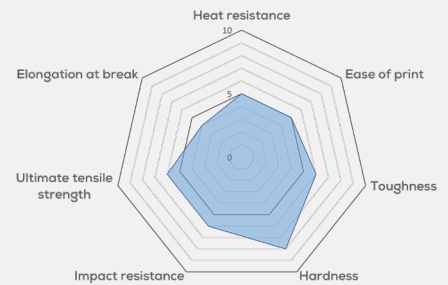
PC/ABS FR V0 is a professional, halogen-free filament for 3D printers. It is designed to meet UL-94 V0 flammability standards, which means it is self-extinguishing and meets the highest fire safety standards.

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

Disclaimer

The product- and technical data provided in this datasheet is correct to the best of Spectrum Group Sp. z o.o. knowledge and are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary according to printing conditions, model complexity, environmental conditions, etc. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications. Spectrum Group Sp. z o.o. shall not be made liable for any damage, injury or loss induced from the use of Spectrum Group Sp. z o.o. materials in any particular application.