

FlameGuard ASA 275

MATERIAL PROPERTIES

Specific Gravity, 23°C	1.08 g/cm ³	
Melt Flow Rate, 220°C, 10kg	5 g/10min	ASTM D1238
Mechanical		
Tensile Strength, at Yield, 23°C, 50mm/min, 3.2mm	42 MPa	ASTM D638
Tensile Elongation at Break, 23°C, 50mm/min, 3.2mm	35% (Min)	ASTM D638
Tensile Modulus, 23°C, 50mm/min, 3.2mm	1800 MPa	ASTM D638
Flexural Strength, 23°C, 15mm/min, 3.2mm	64 MPa	ASTM D790
Flexural Modulus, 23°C, 15mm/min, 3.2mm	1900 MPa	ASTM D790
Izod Impact Strength, Notched, 3.2mm, 23°C	435 J/m	ASTM D256
Izod Impact Strength, Notched, 3.2mm, -30°C	60 J/m	ASTM D256
Izod Impact Strength, Notched, 6.4mm, 23°C	340 J/m	ASTM D256
Izod Impact Strength, Notched, 6.4mm, -30°C	60 J/m	ASTM D256
Rockwell Hardness, R-Scale	92	ASTM D785
Thermal		
HDT, Edgewise, 1.82MPa, 6.4mm, Unannealed	86°C	ASTM D648
VICAT, 50N, 50°C/h	94°C	ASTM D1525
RTI Electrical	50°C	UL 746B
RTI Mechanical with Impact	50°C	UL 746B
RTI Mechanical without Impact	50°C	UL 746B
Fire Resistance (1.6mm)	VO	UL94-equivalent test

GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	200-240°C
Bed temperature	40-60°C
Active cooling fan	0 - 20%
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 - 2.70 mm
Print speed**	40-200 mm/s
Closed chamber	recommended for larger prints
Dry box	not necessary
Ruby or hardened nozzle	not necessary

* settings are based on a 0,4 mm nozzle.

** depending on the geometrical complexity

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.

DESCRIPTION

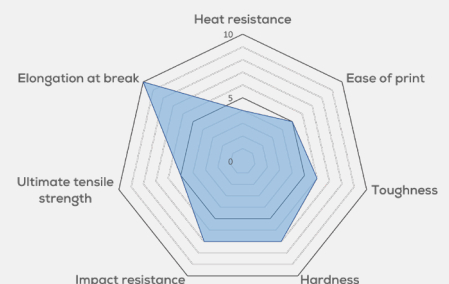
Spectrum FlameGuard ASA 275 is an advanced flame-retardant filament designed for 3D printing, meeting UL94 VO standards for fire safety. It combines excellent mechanical properties, UV resistance, and easy printability, making it ideal for durable prototypes and applications requiring enhanced fire protection.

FEATURES

- Designed to meet UL 94 VO standards
- Flame retardant, self-extinguishing
- Excellent resistance to outdoor exposure
- UV resistant
- Printable on desktop printers without a heated chamber

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