Raise3D Industrial PA12 CF Support Technical Data Sheet

Raise3D Industrial PA12 CF Support Filament is a break-away support material specially developed for printing process with carbon fiber reinforced filaments. During 3D printing process, it creates a stable support structure, provides proper adhesion to interface with printed parts, and counteract with the warpage tendency, therefore it improves the surface quality for overhangs and cavities of the printed parts significantly; After a print is finished, the support structure can be easily removed (break-away) by hands from the printed parts. This support material exhibits a broad compatibility with many Raise3D OFP (Open Filament Program) certified high-performance carbon fiber reinforced composite filaments, and is more cost-effective comparing with water-soluble support material.

Filament Specs

Property	Testing Method	Roundnes Typical Value s
Density (g/cm^3 at 21.5 °C)	ASTM D792	1.15
Melt index (g/10 min)	250 °C, 2.16 kg	16
Odor	/	Almost odorless
Solubility	/	Insoluble in water

Material Compatibility

Material	Compatibility
PA12 CF	++
PA based filament	++
PA based CF filaments	++
Other CF filaments	+

++ support the model very well.
+ generally support the model depending on its geometry.
- generally doesn't support the model depending on its geometry.
-- do not support the model.

Note:

1. It is recommended to use hardening steel nozzle, tungsten steel or ruby nozzle to avoid nozzle abrasion.

2. PA12 CF Support is sensitive to moisture and should always be stored and used under dry conditions (relative humidity below 20%).

3. Dry PA12 CF support in the oven at at 80°C for 6-8 hours before printing.

Disclaimer

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

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