DATASHEET

ExcelFil™ - High Grade 3D Printing Filament
Successful 3D prints, first time, every time!

voltivo
3D Manufacturing

Product Overview
Voltivo ExcelFil™ is a high grade, high density 3D printing filament available in both PLA and ABS that is perfectly suited to and tested with a wide range of 3D printers. It allows for easy extrusion due to its tight laser-controlled tolerance, smooth flow over a broad temperature range, rapid cooling and a high tensile strength. It comes in a large range of colors and in two diameters that fit most available printers. We ship ExcelFil™ on sturdy recyclable spools, vacuum sealed with a desiccant bag to ensure it arrives moisture free.

Primary Features & Benefits
Customers choosing ExcelFil™ get more than just a supply of high quality filament. In addition, we provide the value-added services below for our customers:

Filament Characterization
On average, we spend 2 weeks testing and characterizing each new material, diameter and color combination through various semi-automated tests. Above and beyond the manufacturing quality control, we re-run these tests on a quarterly basis to ensure we always ship ExcelFil™ that provides reliable and repeatable print results.

ExcelFil™ Filament Print Support Database
Creating successful prints greatly depends on the correct print settings. 3D printing unfortunately is not as straight forward as desktop printing. The various potential combinations of material, color, 3D model, slicing software and printer hardware each greatly influence the success of 3D prints. Based on the characterization tests outlined above, we make available a great amount of information for specific use cases, providing our customers with a great starting point for getting the most out of their ExcelFil™. Each ExcelFil™ spool is labeled with a QR Code which provides direct access to the specific support database entry for that spool. The database and Voltivo website are both smartphone compatible for quick lookup on-the-go as well.

The Environment
We care a great deal about our environment. Voltivo tries to strike a balance between convenience and protecting natural resources. Our PLA is made from renewable sources, namely corn starch and sugarcane. However, for specific applications, which require higher operating temperatures that are close to exceed PLA's melting point, we offer an ABS option. In certain countries, we provide a recycling service for your empty spools.

Specifications

Characteristic	PLA	ABS
Diameter & Accuracy	Nominal 2.85mm ±0.05mm	
	Nominal 1.75mm ±0.05mm	
Roundness Accuracy	±0.05mm	
Density	1.31g/cm³	1.01g/cm³
Melt Point	210°C	260°C
Print Temperature Range (Provided on Support Site for every Color/Material)	185°C to 195°C	220°C to 260°C
Spool	Spool Outer Diameter: 200 mm	
	Spool Inner Diameter: 32 mm	
	Width: 60 mm	
Packaging	Vacuum-sealed PE bag with desiccant, outer cardboard protective box	
Labeling	QR code For support link & SKU, EAN13	
Compliance	RoHS 2	
Retail Packaging	210mm x 210mm x 75mm	
Material Net Weight	1kg ±0.05kg	
Gross Weight	1.35kg	

Color Choices

Color	Pantone¹		Color -SKU	PLA	ABS
Coal Black	N/A		CBLCK	1.75/3mm	1.75/3mm
Snow White	P 1-1 C		SWHIT	1.75/3mm	1.75/3mm
Ash Grey	P 179-6 C		AGREY	1.75/3mm	1.75/3mm
Cherry Red	P 48-16 C		CHRED	1.75/3mm	1.75/3mm
Candy Yellow	P 1-8 C		CYELL	1.75/3mm	1.75/3mm
Deep Purple	P 88-8 C		DPURP	1.75/3mm	1.75/3mm
Sky Blue	P 109-5 C		CKBLU	1.75/3mm	1.75/3mm
Ocean Blue	P 102-16 C		OBLUE	1.75/3mm	1.75/3mm
Leafy Green	P 143-16 C		LGREE	1.75/3mm	1.75/3mm
Signal Orange	P 34-8 C		SORAN	1.75/3mm	1.75/3mm
No Dye					
Natural Beige	N/A		NBEIG	1.75/3mm	1.75/3mm
Transparent	N/A	TP	TRANS	1.75/3mm	1.75/3mm
Metallic range					
Arctic Silver	P 179-9 C		ASILV	1.75/3mm	1.75/3mm
Bling Gold	P 12-6 C		BGOLD	1.75/3mm	1.75/3mm

¹ The Pantone color match is an approximation. Please consider ordering a samples for accurate colors.

Ordering Information

SKU: EF-MMM-DDD-CCCCC

MMM	=	Material: ABS or PLA
DDD	=	Nominal Diameter: 175 or 300
CCCCC	=	Color Code (please see beside)

Example: EF-PLA-300-SWHIT : PLA 3mm in Snow White

Order Quantities and price groups:
An MOQ of 60 spools per color/diameter applies

>=360 spools   Wholesale Price Group
>=720 spools   Distribution Partner Price Group