

Features

- Very soft and flexible (Shore 30D)
- Ideal for rubber-like, bendable, and stretchable prints
- Resistant to crushing, bending, and deformation, high impact resistance in low temperatures
- Very good thermal, chemical and abrasion resistance

RS PRO 3D Printing Materials Flex 30D Graphite

RS Stock No.: 0841911



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

FLEX 30D

Flex 30D is an exceptionally flexible filament designed for projects that require rubber-like performance. Its low hardness (30 Shore D) makes it ideal for parts that need to withstand bending, crushing, or stretching. The material operates reliably across a wide temperature range and offers good chemical resistance. It performs best on direct-drive extruders at slower printing speeds, and in some cases, the extruder pressure may need to be adjusted.

General Specifications

Printing Technology	FDM
Printing Material	Flex 30D
Machine Specific	No
Colour	GRAPHITE (Pantone Cool Gray 10C)
For Use With	Common Desktop 3D Printers
Material Type	TPE
Print Speed	20-40 mm/s for 0.2mm layer height
Bed Prep	PEI+adhesive, glass+adhesive

Mechanical Specifications

Diameter	1.75mm
Weight	1kg
Specific gravity	1,07 g/cc
MFI	17 g/10min (220 °C / 2.16kg) (D1238)
Tensile strength	22 MPa (ASTM D638)
Elongation at break	870% (ASTM D638)
Tolerance	± 0.05 mm
Roundness	± 0.03 mm
Hardness	Shore D 30
Spool weight	258 g
Spool size	200 mm (D) x 68 mm (H), hub diameter 52 mm
Ovalidity Tolerance (Max)	± 0.03 mm

Operation Environment Specifications

Printing Temperature	200–220° C
Melting Temperature	174° C
Melting Point	174° C
Storage Temperature	15–25° C

Approvals

Compliance/Certifications	RoHS, REACH
Declarations	MFR Declaration of Conformity

Similar Products

Parameters	Stock#	Stock#	Stock#	Stock#
Brand	RS RPO	RS RPO	RS RPO	
Printing Technology	FDM	FDM	FDM	
Printing Material	Flex 30D	Flex 40D	Mattflex 40D	
Machine Specific	No	No	No	
Colour	- BLACK - GRAPHITE - ORANGE - PINK - RED - WHITE - YELLOW	- BEIGE - BLACK - BLUE - GRAPHITE - GRAY - NAVY BLUE - ORANGE - RED - SKIN1 - SKIN2 - SKIN3 - WHITE - YELLOW	- BLACK - GRAPHITE	
For Use With	FDM 3D Printer	FDM 3D Printer	FDM 3D Printer	
Material Type	TPE	TPE	TPE	
Diameter	1,75 mm	1,75 mm	1,75 mm	
Weight	1 kg	1 kg	1 kg	
Specific gravity	1,07 g/cc	1,16 g/cc	1,16 g/cc	
MFI	17 g/10min	7 g/10min		
Tensile strength	22 MPa	28 MPa	30 MPa	
Elongation at break	870%	700%	600%	
Impact strength		N.B.		
Tolerance	± 0.05 mm	± 0.05 mm	± 0.05 mm	
Roundness	± 0.03 mm	± 0.03 mm	± 0.03 mm	
Hardness	Shore D 30	Shore D 40	Shore D 40	
Moisture absorption		0,6%, 24hr		
Spool weight	258 g	258 g	258 g	
Spool size	200 mm (D) x 68 mm (H), hub diameter 52 mm	200 mm (D) x 68 mm (H), hub diameter 52 mm	200 mm (D) x 68 mm (H), hub diameter 52 mm	
Ovalidity Tolerance (Max)	± 0.03 mm	± 0.03 mm	± 0.03 mm	
Printing Temperature	200-220°C	200-220°C	210-230°C	
Melting Temperature	174°C	174°C	160°C	
Melting Point	174°C	174°C	160°C	

INCLUDES WITH PRODUCT: VACUUM BAG, DESICCANT BAG