McMASTER-CARR_®

3D Printer Filament

Eco-ABS Plastic, Dremel Eco-Bla-01, Black



Material	ECO-ABS Plastic
Shape	Wire
Manufacturer	Dremel
Manufacturer Series	ECO-ABS
Manufacturer Model Number	ECO-BLA-01
For Manufacturer Series	3D45
Diameter	1.75 mm
Diameter Tolerance	-0.05-0.05 mm
Length	264 m
Printing Temperature	190° to 240° C 374° to 464° F
For Printer Bed	60° C
Temperature	140° F
For Printer Speed	60,000 mm/s
Tensile Strength	8,410 psi (Good)
Hardness	Not Rated
Maximum Exposure Temperature	63° C 145° F
For Min. Nozzle Opening Diameter	0.2 mm
Spool Diameter	181 mm
Depth	55 mm
Material	Plastic
Container Type	Spool
Weight	750 g
Clarity	Opaque
Features	RFID Tag
Performance Properties	High Strength
Density	1.2 g/cm ³
Flexural Modulus	442,000 psi
Flexibility	Semi-Rigid
Water Absorption	Not Rated
Color	Black
RoHS	RoHS 3 (2015/863/EU) Compliant
REACH	REACH (EC 1907/2006) (01/17/2022, 223 SVHC) Compliant
DFARS	Specialty Metals COTS-Exempt
Country of Origin	Peoples Republic of China

Schedule B	847790.0096
ECCN	EAR99

Build parts and prototypes from these filaments using Dremel fused filament fabrication (FFF) 3D printers. An RFID tag on the spool communicates with your printer, automatically adjusting it to the correct temperature and print speed for the filament material and notifying you when the filament is running out.

ECO-ABS is less brittle and more impact resistant than PLA, so these filaments are good for printing parts that are frequently handled, dropped, or heated. They are, however, a little more high maintenance—parts may warp during cooling, so they require a heated printer bed.

Tensile strength is the best measure of a filament's overall strength. Similar to the stress applied on a rope during a game of tug-of-war, it's the amount of pulling force a material can handle before breaking. A higher rating means a stronger filament. A tensile strength of 5,000 psi and above is considered good; 12,000 psi and above is excellent.

Maximum exposure temperature is the point at which a printed part will begin to deform. Above this temperature, your printed parts will start to lose structural integrity.