

DATASHEET - Insole & Midsole Filament Black

Description

Insole & Midsole Filament Black is a durable thermoplastic filament. It is specially developed for the production of insoles/orthotics/midsoles. The material is optimized for the FDM/FFF process in terms of thermal stability and flow properties. The material is tested for biocompatibility according to ISO 10993-5.

Print settings

These are recommended settings that may vary between different printers and also depend on environmental factors.

Property	Setting
Extruder	DirectDrive
Nozzle diameter	0,8 mm
Nozzle temperature	210 - 250°C
Build plate material	Glass or PEI
Speed	30 - 40mm/s
Layer height	≥0,1 mm
Build chamber temperature	Unheated
Build plate temperature	Unheated
Cooling	50 - 100%

Material properties

Test	Value
Tensile Modulus	15,4 MPa
Elongation at break	510%
Density	1.09 g/cm ³
Shore hardness	98A

Storage and shelf life

Filament should be stored at room temperature (18-25°C (64.4 -77.0°F)) in a dry and dark place with humidity below 15%. Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of at least 24 months. To obtain the best parameters of the printed object, it is recommended to dry the material prior to usage and to 3D print it directly from a dry box.