



NinjaFlex™

Flex your 3D Imagination.

Slice open a world of possibilities, limited only by your imagination. **NinjaFlex™**, a cutting-edge filament for 3D printers, is a specially formulated thermoplastic elastomer (TPE) that produces flexible prints with elastic properties. Patent pending technology allows for smooth feeding and clean, high-quality printed parts.

Best Suited For

- Fused Deposition 3D printers that use 1.75mm or 3mm filament.
- 3D printers that accept other types of filaments such as ABS and PLA.

Features

- Filament shore hardness of approximately 85A
- Consistent diameter and material properties provide reliable, high quality prints
- Patent pending technology allows for smooth feeding
- Low tack, low CoF exterior allows smooth feed through filament guides
- High elasticity and excellent abrasion resistance
- Outstanding heat and water resistance
- Excellent build platform adhesion and bonding between layers
- REACH and RoHS 2002/95/EC Directive Compliant
- 1.75mm filament spool = .50 kg
- 3.00mm filament spool = .75 kg

Processing Guidelines

- Recommended extruder temperature: 210-230°C
- Recommended platform temperature: 30-40°C

*To learn more about or purchase NinjaFlex, please visit:
www.fennerdrives.com/3d or call 1-800-243-3374.*

NinjaFlex™

Flex your 3D Imagination.



FAQs

What type of extruders work with NinjaFlex?

- Extruders that utilize a spring loaded roller bearing to create pressure against the extruder drive gear.
- Because of its flexibility, the filament must also be supported between the exit of the drive gear and the entrance to the melt chamber.
- A good example of this type of extruder mechanism is shown here: www.thingiverse.com/thing:147518

Is it necessary to coat the build platform with Kapton® tape or hairspray?

- NinjaFlex bonds well to most surfaces (including aluminum and glass), so coating the build platform is not necessary.
- Kapton tape can be used with NinjaFlex, but the adhesion of the printed part to the tape may be stronger than the adhesive holding the tape to the build platform.

Will NinjaFlex feed well through plastic guide tubes?

- While the low coefficient of friction surface of NinjaFlex has been formulated to reduce surface tack and allow the filament to feed more easily, the use of PTFE guide tubes may be beneficial to further reduce pull at the extruder.

Is NinjaFlex rated for food contact?

- Although NinjaFlex does not contain any known toxins, it is not recommended for food contact applications.

Are there any special printer settings that need to be adjusted for NinjaFlex?

- NinjaFlex generally works well at similar extruder settings to ABS, however, adjusting the printer's retraction settings can improve stop/start print quality.

Any other tips for using NinjaFlex?

- When switching from another polymer (such as ABS or PLA) purge thoroughly before starting a print.
- As with other materials, when preheating, use a lower temperature (~180-200°C) to prevent excess material from draining prior to starting a print.

Are there any safety concerns or considerations when using NinjaFlex?

- NinjaFlex should be used in a well-ventilated area according to recommended operating conditions.
- TPE products are capable of releasing small amounts of fumes at high temperatures. While these fumes are generally considered tolerable and less odorous than ABS, care should be taken to minimize exposure, particularly among sensitive persons.

To learn more about or purchase NinjaFlex, please visit: www.fennerdrives.com/3d or call 1-800-243-3374.