

## STYX-12

STYX-12 is an industrial PA12 grade nylon filament which combines excellent mechanical, chemical and hygroscopic properties with printability.

STYX-12 has a very low water absorption compared to other nylons and can be printed at relatively low temperatures. This combination of properties has resulted in high-performance and industrial-grade nylon which can be printed on a wide-range of FFF/FDM 3D printers.

### Unique features

- Superb mechanical properties
  - Strong, flexible, high impact resistance, high crack resistance, high scratch resistance
- Excellent chemical resistance
- Excellent weather and UV resistance
- Outstanding dimensional stability
- Good first layer adhesion to EasyPad + DimaFix prepared print bed
- Very clear in its natural form (without added colorants)

### General printing guidelines \*

<b>Nozzle size:</b> $\geq 0.2\text{mm}$	<b>Layer height:</b> $\geq 0.1\text{mm}$	<b>Flow rate:</b> $\pm 100 - 110\%$
<b>Print temp:</b> $\pm 240 - 270^\circ\text{C}$	<b>Print speed:</b> Low / Medium	<b>Retraction:</b> Yes $\pm 5\text{mm}$ (@45mm/s)
<b>Heat bed:</b> $\pm 80 - 120^\circ\text{C}$	<b>Fan speed:</b> 10-30%	<b>Experience level:</b> Intermediate / Expert

*\*) Above displayed settings are meant as guidance to find your optimal print settings. These ranges in settings should work for most printers, but please do feel free to experiment outside these ranges if you think it is suitable for your printer. There are a lot of different type of printers, hot-ends and printer offsets that it is extremely difficult to give an overall one-size-fits-all setting.*

### Filament length

<b><math>\rho</math>: 1.02 g/cc</b>	<b>50 gr coil</b>	<b>0.5 Kg spool</b>			
<b><math>\varnothing</math> 1.75mm</b>	$\pm 20.4\text{m}$	$\pm 204\text{m}$			
<b><math>\varnothing</math> 2.85mm</b>	$\pm 7.7\text{m}$	$\pm 77\text{m}$			

### Product export information

<b>HS Code:</b> 39169090	<b>Description:</b> Monofilament	<b>Country of origin:</b> the Netherlands
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### **Compliance \***

This filament is compliant to below listed directives and regulations.

- RoHS directive 2011/65/EC
- REACH directive 1907/2006/EC

*\* ) This declaration of conformity to directives and regulations is prepared according to our present standard of knowledge and may be amended if new cognitions are available and applies only for the above described products.*