Technical Data Sheet

FORMFUTURA®

Product name: STYX-12
Version: v3

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.

Properties	Typical value	Test Method	Test condition
Physical			
Specific gravity	1.02 g/cc	ISO 1183	-
Melt flow rate	-	-	-
Water absorption	-	-	-
Moisture absorption	-	-	-
Mechanical			
Impact strength	14 KJ/m²	ISO 179	Charpy Notched @23° C (73° F)
Tensile strength	60.0 Mpa	ISO 527 -1/-2	@Yield
Tensile modulus	1400 Mpa	ISO 527	-
Elongation at break	>150%	ISO 527 -1/-2	0
Flexural strength	-	-	-
Flexural modulus	-	-	-
Hardness	81	ISO 868	Shore D Hardness
Thermal			
Print temperature	± 240 - 270° C	-	-
Melting termperature	± 250 ± 10° C	ISO 11357	-
Viscat softening temp.	± 105° C	ISO 868	264psi annealed
Optical			
Haze	-	-	-
Transmittance	-	-	-
Gloss	-	-	-

Product details, certifications and compliance	
HS Code	39169090
REACH compliant	Yes
RoHS certified	Yes

Diameter	Tolerance	Roundness
1.75mm	± 0.05mm	≥ 95%
2.85mm	± 0.10mm	≥ 95%