

# FS-11

## **TECHNICAL DATA SHEET**

#### FILSHAPER FS-11

Support filament in VSHAPER offer. It is sold in natural color. FS-11 filament is mainly used as support material. We recommend using it in combination with ASA, ABS, PET-G, PA12, PA+GF, PA+CF, PEEK and TPU. It's soluble in FS-EX which is sold separately.

### DELIVERY OF FILSHAPER FS-11

FS-11 filament has the nominal diameter of 1,75mm and is fit for FDM/FFF printing. It's supplied in 0,5kg spool. The spools are packed in vacuumed plastic bags to prevent hygroscopicity.

#### STORAGE

Store the filament in airtight packaging in dry place. The filament is usable up to 6 months after opening.

### DRYING RECOMMENDATIONS

It is recommended to dry the filament before every usage to avoid stringing, bubbling or other defects: 4h in 80°C

Mechanical properties	Value	Unit	Test Standard	
Tensile Modulus	-	MPa	-	
Tensile Strenght	-	MPa	-	
Yield stress	-	MPa	-	
Yield strain	-	%	-	
Stress at break	-	MPa	-	
Nominal strain at break	-	%	-	
Flexural modulus	-	MPa	-	
Flexural strength	-	MPa	-	
Charpy impact strength, +23°C	-	kJ/m²	-	
Charpy impact strength, -30°C	-	kJ/m²	-	
Izod notched impact strength, +23°C	-	kJ/m <sup>2</sup>	-	
Izod notched impact strength, -30°C	-	kJ/m <sup>2</sup>	-	
Hardness (R-Scale)	-	-	-	

Thermal properties	Value	Unit	Test Standard
Melting temperature	-	°C	-



Glass transition temperature	110	°C	-
Temp. of deflection under load A, 1 .80 MPa (HDT)	-	°C	-
Temp. of deflection under load B, 0 .45 MPa (HDT)	-	°C	-

Physical properties	Value	Unit	Test Standard	
Density	1,1	g/cm <sup>3</sup>	ISO 1183	
Filament Diameter	1.75	mm	-	
Linear Shrinkage	-	%	-	

Burning behavior	Value Unit		Test Standard	
Flammability class	-	class	-	

Rheological properties	Value	Unit	Test Standard	
Melt mass-flow rate, MFR	5	g/10 min	ISO 1133	
Temperature	200	°C	-	
Load	10	kg	-	

Characteristics	
Key Feature, Industrial Sector	-
Key Feature, Processing	3D printing
Key Feature, Solvent	FS-EX
Key Feature, Electrical	Insulator
Example applications	Support
Processing	FFF/FDM
Special Characteristics	Soluble in FS-EX
Color	Natural
Delivery form	Monofilament

Drinting cottings	VSHAPER 270			VSHAPER 500		
Printing settings	STD	PRO	MED	STD	PRO	MED
Print temperaturę	-	-	-	260°C	260°C	260°C
Bed temperaturę	-	-	-	95°C	95°C	95°C
Chamber temperature	-	-	-	60°C	60°C	60°C
Adhesive plate material	-	-	-	V-SURFACE LT	V-SURFACE LT	V-SURFACE LT
Adhesive glue	-	-	-	Dimafix	Dimafix	Dimafix
Model shrinkage	-	-	-	-	-	-

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