

# HIPS

## **TECHNICAL DATA SHEET**

### FILSHAPER HIPS

Support filament in VSHAPER offer. It is sold in natural color. HIPS filament is mainly used as support material. We recommend using HIPS in combination with styren materials such as ABS and ASA.

### **DELIVERY OF FILSHAPER HIPS**

HIPS filament has the nominal diameter of 1,75mm and is fit for FDM/FFF printing. It's supplied in 1kg 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	28	MPa	ISO 527	
Yield stress	-	MPa	-	
Yield strain	-	%	-	
Stress at break	-	MPa	-	
Nominal strain at break	55	%	ISO 527	
Flexural modulus	-	MPa	-	
Flexural strength	-	MPa	-	
Charpy impact strength, +23°C	-	kJ/m <sup>2</sup>	-	
Charpy impact strength, -30°C	-	kJ/m <sup>2</sup>	-	
Izod notched impact strength, +23°C	8	kJ/m <sup>2</sup>	ISO 179	
Izod notched impact strength, -30°C	-	kJ/m <sup>2</sup>	-	
Hardness (R-Scale)	77	-	ISO 2039	

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



Temp. of deflection under load A, 1 .80 MPa (HDT)	94	°C	ISO 75
Temp. of deflection under load B. 0. 45 MPa (HDT)	_	°C	_

Physical properties	Value	Unit	Test Standard
Density	1,04	g/cm <sup>3</sup>	ISO 1183
Filament Diameter	1.75	mm	-
Linear Shrinkage	0,4-0,7	%	-

Burning behavior	Value Unit		Test Standard	
Flammability class	НВ	class	UL94	

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

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



Deinting and in a	VSHAPER 27	VSHAPER 270			VSHAPER 500		
Printing settings ST	STD	PRO	MED	STD	PRO	MED	
Print temperature	-	240°C	240°C	265°C	265°C	265°C	
Bed temperature	-	95°C	95°C	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	V-SURFACE LT	V-SURFACE LT	
Adhesive glue	-	Dimafix	Dimafix	Dimafix	Dimafix	Dimafix	
Model shrinkage	-	~0,8%	~0,8%	~0,8%	~0,8%	~0,8%	

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