3DGENCE

TECHNICAL DATA SHEET

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HIPS

Support Material

MATERIAL PROPERTIES		Standard
Density	1.05 g/cm^3	ISO 1183
Melt Flow Rate, (200°C/5.0kg)	12 g/10min	ISO 1133

Mechanical Properties		Standard
Tensile Stress at Yield	16 MPa	ISO 527-2/5
Tensile Stress at Break	16 MPa	ISO 527-2/5
Tensile Strain at Yield	1.5%	ISO 527-2/5
Tensile Strain at Break	50,00%	ISO 527-2/5
Flexural Modulus	2000 MPa	ISO 178
Flexural Strength	50 MPa	ISO 178
Charpy Notched Impact Strength	7kJ/m^2	ISO 179/2
Notched Izod Impact	90J/m	D 256
Rockwell Hardness (R-Scale)	55	ISO 2039-2

Thermal Properties		Standard
Vicat Softening Temperature	87°C	ISO 306/B50
Heat Deflection Temperature	88°C	ISO 75-2/B

Flammability		Standard
Flame Rating (0.0630 in (1.60mm))	HB	UL 94

General information

DESCRIPTION

HIPS is a support material designed for additive manufacturing for FDM/FFF technology. It is usually used as support for components manufactured with ABS, where HIPS supports are dissolved in the citric acid solution (D–Limonene) upon completion of the manufacturing process. Further, you can use HIPS as a base material for manufacturing of components which require a reduced processing shrinkage as compared to ABS.

FEAUTURES

- lower shrinkage rate than classic ABS
- possibility of mechanical treatment (drilling, turning, milling or grinding)
- high impact resistance
- energy absorption and dissipation capabilities
- light
- fully soluble in D-Limonene
- matt surface

Detailed data are available on our website
www.3dgence.com

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