

Manufacturer: Fiberlab S.A., Brzezie 387, 32-014 Brzezie, Poland

Description: FiberFlex 30D filament designed for printing in FFF/FDM technology, available in different colors, wound on a spool, vacuum-packed in plastic, placed in a cardboard box.

Technical information:

Diameter: 1,75 mm

Diameter Tolerance: +/- 0,02 mm

Avg Roundness: + 0,01 mm

Print Temperature: 200°C - 220°C

Bed Temperature: 50°C - 60°C (Heating is not required but recommended).

Mechanical properties:

Properties	ASTM No	Units	FiberFlex 30D
Hardness	D2240	Shore D	30
Density	-	g/cm ³	1,07
Water Absorption	D570	%	0,8
Mold Shrinkage	D955	%	0,4
Tensile Stress at 10% Strain	D638	kg/cm ²	18
Tensile Stress at Break	D638	kg/cm ²	220
Elongation at Break	D638	%	900
Flexural Modulus	D790	kg/cm ²	280
Tear Strength	D1004	kN/m	95
Izod Impact Strength / Notched	D256	kg*cm/cm	N.B.
Resilience	D2632	%	72
Melting Point	D3418	°C	174
HDT	D648	°C	-

Chemical resistance:

Chemical	Rating	Chemical	Rating
Acetaldehyde	Excellent	Gasoline	Excellent
Acetic acid	Excellent	Glycerin	Excellent
Acetone	Fair	n-Hexane	Excellent
Acetylene	Excellent	Hydrazine	Soluble
Amine	Soluble	Hydrochloric acid	Poor
Aniline	Poor	Isopropyl alcohol	Excellent
ASTM oil No. 1	Excellent	Iso-octane	Excellent
ASTM oil No. 3	Excellent	m-Cresol	Soluble
ASTM ref. fuel A	Excellent	Methyl alcohol	Excellent
ASTM ref. fuel B	Excellent	Methyl ethyl ketone	Excellent
ASTM ref. fuel C	Poor	Methylene chloride	Soluble
Benzene	Fair	Naphthalene	Fair
Butane	Excellent	Nitric acid	Soluble
Butyl acetate	Fair	o-Chlorophenol	Soluble
Carbon monoxide	Excellent	Perchloroethylene	Soluble
Carbon tetrachloride	Poor	Petroleum ether	Excellent
Chlorobenzene	Soluble	Phenol	Soluble
Chloroform	Soluble	Potassium hydroxide	Good
Chlorosulfonic acid	Poor	Sea water	Excellent
Chloric acid	Good	Silicone grease	Excellent
Cresol	Poor	NaCl satd. water	Excellent
Cyclohexane	Good	Sodium hydroxide	Good
Dimethyl formamide	Fair	Steam (100°C)	Fair
D.O.P.	Excellent	Sulfuric acid 5%	Good
Ethyl acetate	Fair	Sulfuric acid 10%	Fair
Ethyl alcohol	Excellent	Sulfuric acid 50%	Soluble
Ethylene chloride	Soluble	THF	Fair
Ethylene dichloride	Soluble	Toluene	Fair
Ethylene glycol	Excellent	Trichloroethane	Soluble
Ethylene oxide	Excellent	Triethanolamine	Soluble
Formaldehyde	Fair	Water	Excellent
Formic acid	Fair	Water (100°C)	Fair
Freon	Excellent	Xylene	Good

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