

BRAND:	Fiberlogy
NAME:	<b>Fiberlogy FIBERFLEX 40D</b>
MANUFACTURER:	Fiberlab S.A., Brzezie 387, 32-014 Brzezie, Poland
DESCRIPTION:	FIBERFLEX 40D 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:	+/- 0.05 mm
Avg Roundness:	+ 0.03 mm
Net Weight:	0.85 kg
Print Temperature:	200°C - 220°C
Bed Temperature:	50°C - 60°C (when using plates or other means to increase the adhesion, the heating of the bed is not required)

**MATERIAL PROPERTIES:**

Właściwości mechaniczne	Test Method	Unit	Typical Value
Hardness	D2240	Shore D	40
Density	-	g/cm <sup>3</sup>	1.16
Water Absorption	D570	%	0.6
Mold Shrinkage	D955	%	0.8
Tensile Stress at 10% Strain	D638	kg/cm <sup>2</sup>	44
Tensile Stress at Break	D638	kg/cm <sup>2</sup>	270
Elongation at Break	D638	%	680
Flexural Modulus	D790	kg/cm <sup>2</sup>	680
Tear Strength	D1004	kN*/m	115
Izod Impact Strength / Notched	D256	kg*cm/cm	N.D.
Resilience	D2632	%	57
Melting Point	D3418	°C	157
HDT	D648	°C	70
Resistance to Surface Abrasion	D1044 (wheel H-18)	mg	95

**CHEMICAL RESISTANCE:**

<b>Chemical</b>	<b>Rating</b>	<b>Chemical</b>	<b>Rating</b>
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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