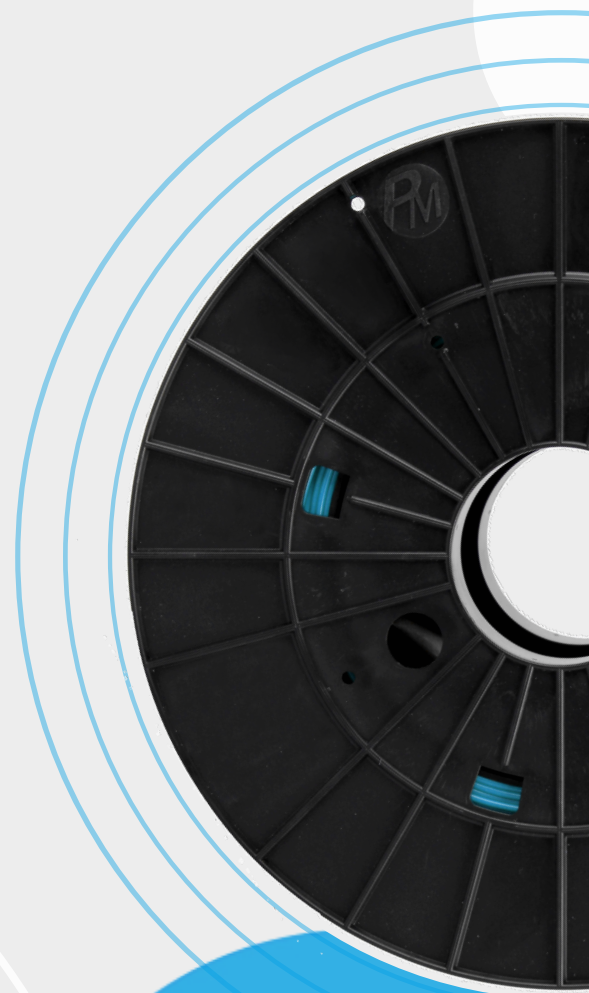




Filament 

PRODUCT PORTFOLIO 2020

WWW.FILAMENT-PM.COM

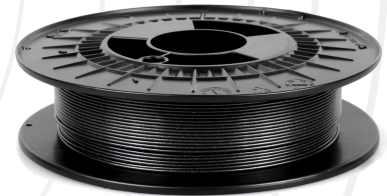


PLA



- THE MOST COMMONLY USED BASIC MATERIAL
- FOR BEGINNERS (VERY EASY TO PRINT)
- FOR BOTH SMALL AND LARGE PRINTS
- HARD AND TOUGH MATERIAL BUT EASY TO BREAK (BRITTLE)
- TEMPERATURE SENSITIVE (MAY LOSE ITS CHARACTERISTICS AT 60+ °C)
- NO WARPING
- MADE OF BIODEGRADABLE RESOURCES

PETG



- FOR BEGINNERS (VERY EASY TO PRINT) -
- RATHER FOR LARGE PRINTS -
- HARD, TOUGH AND DURABLE MATERIAL -
- TEMPERATURE RESISTANT -
- NO WARPING -
- IDEAL FOR MECHANICAL PARTS (USED TO BE -
- ONE OF THE MAIN MATERIALS FOR PRUSA PRINTERS - PETG 2018)

ABS



- FOR ADVANCED MAKERS
- FOR BOTH SMALL AND LARGE PRINTS
- STRONG AND TOUGH MATERIAL WITH HIGH SURFACE HARDNESS
- HEAT AND IMPACT RESISTANT (UP TO 90°C)
- ACETONE-SOLUBLE (EASY POSTPROCESSING)
- TYPICAL SMELL
- THERMAL CONTRACTING - CLOSED CHAMBER RECOMMENDED

ABS-T



- ABS + MMA (METHYL METHACRYLATE) -
- ABS WITH FEW DIFFERENCES: -
- RATHER FOR SMALL PRINTS -
- EVEN MORE HEAT RESISTANT (UP TO 98°C) -
- HARDER AND STRONGER -
- THERMAL CONTRACTING, MORE DIFFICULT TO PRINT -
- (CLOSED CHAMBER RECOMMENDED EVEN MORE)

PC/ABS



- HIGHLY IMPACT AND HEAT RESISTANT (UP TO 115°C)
- TOUGH AND STRONG MATERIAL
- SELF-EXTINGUISHING AND FIRE-RETARDANT - UL94 V0 CERTIFICATION
- IDEAL FOR MECHANICAL PARTS
- THERMAL CONTRACTING - CLOSED CHAMBER RECOMMENDED

ASA



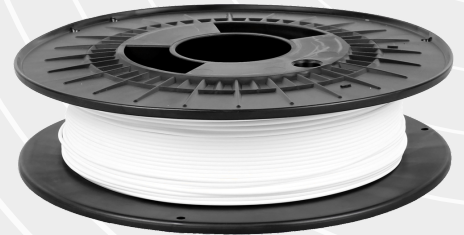
- SIMILAR TO ABS -
- PERFECT FOR OUTSIDE USE -
- UV STABLE, HIGH WATER AND IMPACT RESISTANT -
- GREAT LAYER ADHESION -
- EASY POSTPROCESSING -

CFJET



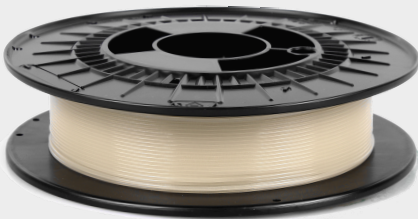
- BASED ON PETG
- CONTAINS 20% OF CARBON FIBRES
- FOR BEGINNERS (EASY TO PRINT)
- HIGHLY WEATHER, CHEMICAL AND IMPACT RESISTANT EVEN AT LOW TEMPERATURES
- MATT SURFACE
- IDEAL FOR MECHANICAL COMPONENTS

FRJET



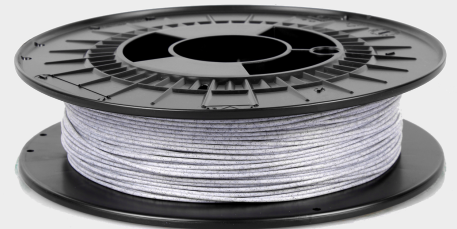
- BASED ON PETG -
- FIRE-RETARDANT AND SELF-EXTINGUISHING - UL94 V0 CERTIFICATION -
- IDEAL FOR ELECTRONIC AND MECHANICAL COMPONENTS -

GLOWJET



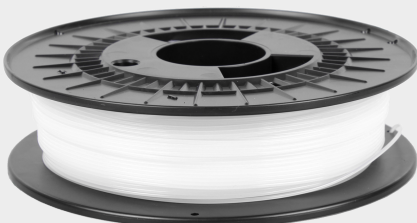
- BASED ON PLA
- CONTAINS PHOSPHORESCENT PIGMENTS
- GLOWS AFTER BEING CHARGED WITH ANY TYPE OF LIGHT

MARBLEJET



- BASED ON PLA -
- GOOD-LOOKING IMITATION OF STONE -
- IDEAL FOR ARCHITECTURAL MODELS -

PAJET



- ALSO KNOWN AS ENGINEERING PLASTICS
- PRINTING CONDITIONS SIMILAR TO ABS
- HIGHLY HEAT (160°C), IMPACT, MECHANICAL AND CHEMICAL RESISTANT
- SMOOTH SURFACE IDEAL FOR SLIDING AND ROLLING COMPONENTS (BEARINGS)

RUBBERJET



- POLYOLEFIN-BASED MATERIAL -
- VERY FLEXIBLE -
- VIBRATION DAMPING -
- HIGHLY IMPACT, CHEMICAL AND WATER RESISTANT -
- MATT SURFACE -
- PRINTING ON PP OFFICE TAPE RECOMMENDED -

PRODUCT COMPARISON

filament 1,75 mm	density	tensile strength	impact strength (charpy)	vicat softening temperature	nozzle temperature	bed temperature	close/open in chamber	cooling fan	properties	solubility
	g/cm ³	MPa	kJ/m ²	°C	°C	°C	c/o	off/%		
ABS	1,04	42	15	94	230-250	100-110	c	off	solid and tough material, good heat and impact resistance	acetone
ASA	1,07	46	14	96	240-260	100-110	c	20%	similar properties to ABS, outdoor use, UV stable, wind resistance	acetone
ABS-T	1,08	48	5	93	230-250	100-110	c	off	solid and tough material, good heat and impact resistance, difficult to print	acetone
CFJet	1,25	54	23	70	220-250	80-90	o	30-50%	contains 20 % of carbon fibres, high weather, chemical and impact resistant	acetaldehyde, benzene
FRJet	1,24	48	22	69	220-250	80-90	o	30-50%	fire-retardant and self-extinguishing, UL94 V0 certification	acetaldehyde, benzene
GlowJet	1,24	53	16	55	200-220	60	o	100%	contains phosphorescent pigments - glows in the dark	ethylene dichloride (EDC), toluene, tetrahydrofuran (THF)
MarbleJet	1,24	53	16	55	200-220	60	o	100%	imitates stone	ethylene dichloride (EDC), toluene, tetrahydrofuran (THF)
PaJet	1,01	50	18	150	230-240	110-120	c	off	engineering plastics, high heat, impact, mechanical and chemical resistance	ethylene dichloride (EDC), toluene, tetrahydrofuran (THF)
PC/ABS	1,19	60	40	115	240-260	100-110	c	off	solid and mechanically resistant, prints better than PC	formic acid, metacresol, phenol, benzyl alcohol
PETG	1,27	48	22	69	220-250	80-90	o	30-50%	solid and durable material, easy to print	acetaldehyde, benzene
PLA	1,24	53	16	55	200-220	60	o	100%	basic material, easy to print	ethylene dichloride (EDC), toluene, tetrahydrofuran (THF)
RubberJet 88A	0,8	5,5	-	110	210-230	0	o	30-50%	flexible and soft rubber material	cyclohexane,
RubberJet 32D	1,1	15	-	110	220-240	0	o	30-50%	flexible and soft rubber material	cyclohexane, tetrahydrofuran
PEIJet 1010	1,27	110	33	218	350-370	140-150	c	off	very strong material, high temperature resistance - more than 200°C, chemical resistance	

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