



TECHNICAL DATA SHEET FOR PRODUCT:

FRJet FILAMENT

Use	is a material for the FDM (FFF) 3D printing additive technology		
Material	Polyetylentefeftalat + 20% flame retarder, petroleum product		
Diameters	1,75 mm		
Tolerance	± 0,05 mm		
Weight	0,5 kg netto ± 5%		
Packing	spool in Vacuum ZIP bag, inserting to paper box, all in LDPE foil		
Colours	views on web https://www.filament-pm.com/frjet		
Solvents	Acetaldehyde, benzene		
Printing Properties:			
Temperature HE	220 – 250 °C		
Temperature HB	60 - 80 °C		
Surface bed	ultem, PET foil,		
Cooling print object	YES		
Nozzle	All diameters, standart materials		
Printer space	Open / Close		
Material Properties:			
Thermal	vicat softening temperature	ISO 306	85 °C
	heat deflection temperature	ISO 75	70 °C
Mechanical	impact strength	ISO 179	23 kJ/m²
	flexural modulus	ISO 178	2500 MPa
Physical	Density	ISO 1183/B	1,27 g/cm³
	Melt Flow Index	ISO 1133	11 g/10 min
Flammability	Fire resistance	UL94	V0 Class



Testing laboratory No. 1595
accredited by ČIA
according to ČSN EN ISO/IEC 17025: 2005



Bohuslavice 123
798 56 Bohuslavice
IČO 29211506
DIČ CZ29211506

laboratory manager : Eva Kovářová
tel.: + 420 582 383 680

kovarova@testpolymer.cz
www.testpolymer.cz

Test report No. 608/2018

Client:	Zemědělské družstvo Haňovice, PLASTY MLADEČ, Haňovice 18, 78321 Chudobín IČO: 00147346, DIČ: CZ00147346
Client order:	Obj/22/03/2018/PRI/464/I
In-house order:	TP 1013/2018
Application form	1802848
Test material:	PETG EB022 + flame retardant B65AM
Detailed description:	xxx
Form of material:	test specimens - sampled and delivered by customer
Preparation of samples:	xxx
In-house No. of sample:	1802848
Date of receipt of the sample:	23.03.2018

Tests	Test specifications
Horizontal and vertical flame tests	UL 94 art. 7,8,9 ČSN EN 60695-11-10 ed.2

Test No.15	Horizontal and vertical flame tests - 50W (20mm) vertical burning test V-0, V-1, V-2	
Test standard:	UL 94	
Test equipment:	Chamber Atlas HVUL2	
Ignition source:	burner with an inner diameter 9.5 mm	
	The gas used: Methane 2.5	
Test conditions:	blue flame height 20 mm, the exposure time 2 x 10s	
	fume hood has not been used	
	temperature: 22,5°C	relative humidity: 47,5%
Description of the sample (sample type, the color, the location in the product, the number of samples tested)	test specimens of white color 125x13x3mm, 10 pieces	
Conditioning of samples:	5 pieces - 48 hours in the climate chamber at 23±2°C and 50±5% relative humidity; 5 pieces -168 ±2 hours in the hot air oven at 70±2°C and cooled in dessicator min. 4 hours at room temperature	
Conditioning of cotton indicator:	24 hours in dessicator at 23±2°C	
deviations from the standard:	xxx	
Test progress:	The test specimens do not burn after the first or second application of the flame. The material does not drip and does not ignite the absorbent cotton.	

Test report No. 608/2018

Number of test specimen:	Afterflame time after the first flame application t_1 (s)	Afterflame time after the second flame application t_2 (s)	Afterflame plus afterglow time after the second flame application t_2+t_3 (s)	afterflame up to the holding clamp: YES - NO	flaming particles or drops: YES - NO	cotton indicator ignited by flaming particles or drops: YES - NO
specimens conditioned in climate chamber						
1	0	0	0	NO	NO	NO
2	0	0	0	NO	NO	NO
3	0	0	0	NO	NO	NO
4	0	0	0	NO	NO	NO
5	0	0	0	NO	NO	NO
specimens conditioned in hot air oven						
1	0	0	0	NO	NO	NO
2	0	0	0	NO	NO	NO
3	0	0	0	NO	NO	NO
4	0	0	0	NO	NO	NO
5	0	0	0	NO	NO	NO
Classification:						
V-0						
Tested by:	Zapletalová, Dostálová		Date:	26.3.2018, 3.4.2018		
Test evaluated by:	Zapletalová, Dostálová		Date:	26.3.2018, 3.4.2018		

Results

Test results are determined as arithmetic average with standard deviation or expanded standard uncertainty with the coverage factor $k=2$ corresponding to a level of confidence of 95,45 %.

Declaration:

Test results relates only to the test subject.

Laboratory is not responsible for sampling and for sample preparations done by customer

Protocol can not be reproduced other than entire.

All results are metrologically traceable.

Test report was created and approved by:

In Bohuslavice:

23.07.2018



Eva Kovářová

Laboratory manager

