

Figure S1. FTIR spectrum of PETG polyester; 1 – initial sample; 2 – sample after incomplete desorption; 3 – sample after 1 year of incomplete desorption.

Table S1. Process parameters for the production of PETG filaments

| Process parameter | Value |
|--------------------------------------|-----------------|
| Material drying temperature, °C | 60 |
| Material drying time, hour | 8 – 10 |
| Extruder temperature profile, °C | 240-275-260-265 |
| Spinneret forming diameter, mm | 2.5 |
| Cooling bath temperature, °C | 70 |
| Die head forming hole, mm | 2.5 |
| Spinneret drawing, % | 200 – 250 |
| Target filament diameter, mm | 1.62 |
| Ester sorption time, hour | 9 |
| Sorption temperature, °C | 20 |
| Extent of sorption, % | 5.5 |
| Filament diameter after sorption, mm | 1.77 |

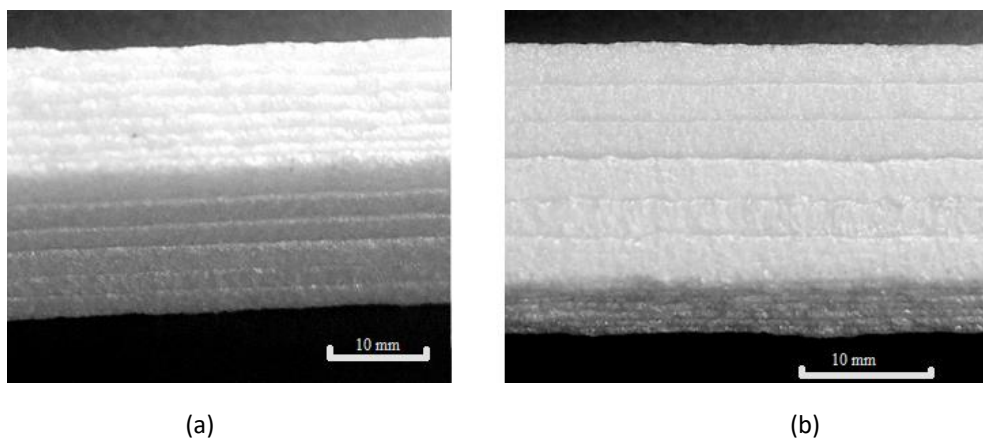


Figure S2. Appearance of the surface of the 3D- printed PETG foam: a - view of the surface from above; b - view of the surface of the built platform.