FILAMENT INNOVATIONS
INDUSTRIAL & HIGH-FLOW 3D PRINTERS
BUILT IN PENNSYLVANIA

MATERIAL CERTIFICATION REPORT

The data presented below is offered in good faith. The values represent acceptable starting points for users to further calibrate the tested material. Every 3D Print is different, therefore, these values are acceptable for the operator to use as a starting point for advanced calibration. Advanced tuning and slicer profiles, in the Filament Innovations supplied ODIN slicer, are only available to Filament Innovations customers. Filament Innovations is not responsible for equipment damage if these values are implemented on non-Filament Innovations equipment or there is an operator error.

Note: Maximum flow-rates and maximum print speeds are not tested as these values are dependent on the geometry of the 3D file, in terms of real world results. For example, tall and narrow geometries will need to be printed slower with more cooling, in comparison to large and flat shapes.

MATERIAL

Name: TPE75A TEFABLOC
Manufacturer: Mitsubishi Chemical Group
Plastic Form: Pellet
Drying: None
Unique Properties: Flexible and Matte Finsh

HARDWARE

Printer: ARES
Manufacturer: Filament Innovations
Pellet Extruder: PULSAR by Dyze Design
Nozzle: 3mm
Nozzle Material: Tool Steel

PROCESSING

Top Barrel (C): 190
Bottom Barrel (C): 210
Nozzle (C): 230
Bed (C): 60C for First Five Layers
  Bed Surface: BuildTak
  Bed Glue: BuildTak PP Adhesive
Chamber (C): 32

SLICER

Name: ODIN
Layer Width (mm): 4
Layer Height (mm): 2
Speed (mm/s): 20
Flow Rate: 96%
Pressure Advance: 0.09
Fan Cooling*: 50%

*TPE75A TEFABLOC is a flexible material with a shore hardness of 75A. Fans should be kept low to avoid early crystallization for better bonding of the layers.

Certification report was generated on July 18th, 2023 by Michael Gorski (PhD, MBA).