

## TECHNICAL DATA SHEET

### KEXCELLED TPU K7 95A

<b>Product code:</b>	<b>Revision Number:</b>	<b>Revision date:</b>	<b>TDS No.:</b>
TPU K7 95A	02	30/08/2021	KT04.20.3008

#### BRIEF INTRODUCTION:

Filament suitable for all commercially available leading brands FDM/FFF Printers.

#### CHARACTERISTIC

High shear strength | oil and grease resistance

#### IDENTIFICATION OF THE MATERIAL

<b>Trade name</b>	TPU K7 95A
<b>Chemical name</b>	Thermoplastic polyurethanes
<b>Use</b>	3D Printing
<b>Origin</b>	KEXCELLED

#### GUIDELINE FOR PRINT SETTINGS

<b>Nozzle temperature</b>	210~230°C
<b>Bed temperature</b>	55~80°C
<b>Bed modification</b>	Tape or glue below 60°C
<b>Active cooling fan</b>	ON, 100%
<b>Layer height</b>	0.2mm
<b>Shell thickness</b>	≥0.8mm
<b>Print speed</b>	20-50mm/s

Settings are based on a 0.4mm nozzle.

#### MATERIAL PROPERTIES

		Test Method
<b>Melt flow rate (MFR)<sup>1</sup></b>	Not determined	ISO 1133
<b>Heat deflection temperature(HDT)<sup>2</sup></b>	/	ISO 75
<b>density</b>	1.15g/cm <sup>3</sup>	ISO 1183
<b>Odor</b>	Odorless	/
<b>Solubility</b>	Insoluble in water	/

1. test conditions: T= 210°C; m= 2.16kg.

2. test conditions:0.45MPa;130°C/h.

**MECHANICAL PROPERTIES|TENSILE TEST**
**Test Method ISO 527**

All test specimens were printed using an Raise3D E2 under the following conditions:

Printing temperature: 225°C

Heated bed temperature: 55°C

Print speed: 50mm/s

Shell thickness: 1.2mm

Infill under 45°



Printed horizontal X,Y-axis

Infill	100%
Tensile strength (Mpa)	>18
Elongation at break (%)	>1240

FILAMENT SPECIFICATION		Test Method
Diameter 1.75mm	1.75±0.03mm	EX1125
Diameter 2.85mm	2.85±0.03mm	EX1125
Diameter 3.00mm	3.00±0.03mm	EX1125
Max roundness deviation (1.75)	0.03mm	EX1125
Max roundness deviation (2.85)	0.03mm	EX1125
Max roundness deviation (3.00)	0.03mm	EX1125
Net weight on reel	1kg	EX1125