

## TECHNICAL DATA SHEET

### KEXCELLED TPU K7 85A

|                      |                         |                       |                 |
|----------------------|-------------------------|-----------------------|-----------------|
| <b>Product code:</b> | <b>Revision Number:</b> | <b>Revision date:</b> | <b>TDS No.:</b> |
| TPU K7 85A           | 01                      | 10/03/2020            | KT04.012.0133   |

### BRIEF INTRODUCTION

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

### CHARACTERISTIC

Oil and grease resistance

#### IDENTIFICATION OF THE MATERIAL

|                      |                             |
|----------------------|-----------------------------|
| <b>Trade name</b>    | TPU K7 85A                  |
| <b>Chemical name</b> | Thermoplastic polyurethanes |
| <b>Use</b>           | 3D printing                 |
| <b>Origin</b>        | KEXCELLED                   |

#### GUIDELINE FOR PRINT SETTINGS

|                           |                         |
|---------------------------|-------------------------|
| <b>Nozzle temperature</b> | 220±10°C                |
| <b>Bed temperature</b>    | 60~80°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>                                      | 1.18g/cm <sup>3</sup> | ISO 1183    |
| <b>Odor</b>   | Odorless              | /           |
| <b>Solubility</b>                                   | Insoluble in water    | /           |

1.test conditions: T= 190°C; m=2.16 kg.

2. test conditions:0.45MPa;120°C/h.

| <b>FILAMENT SPECIFICATION</b>         |             | <b>Test Method</b> |
|---------------------------------------|-------------|--------------------|
| <b>Diameter 1.75mm</b>                | 1.75±0.03mm | EX1125             |
| <b>Diameter 2.85mm</b>                | 2.85±0.03mm | EX1125             |
| <b>Diameter 3.00mm</b>                | 3.00±0.03mm | EX1125             |
| <b>Max roundness deviation (1.75)</b> | 0.03mm      | EX1125             |
| <b>Max roundness deviation (2.85)</b> | 0.03mm      | EX1125             |
| <b>Max roundness deviation (3.00)</b> | 0.03mm      | EX1125             |
| <b>Net weight on reel</b>             | 1kg         | EX1125             |