Thermoplastic Polyurethane (TPU) is elastic and melt-processable and can be colored through various processes. It is an extremely flexible material that is adaptable to many applications. TPUs are linear segmented block co-polymers composed of hard and soft segments. The soft segment can be either a polyether or polyester type, depending upon the application. Its range of physical properties enables TPU to be used as both a hard rubber and a soft engineering thermoplastic.

Summa-Flexx50 is a Polyester-based TPU with a 50 Shore D hardness, a good general purpose grade for FDM with excellent chemical resistance.

**Features & Benefits**
- Compatible with PVC and other polar plastics
- Unaffected by oils
- Excellent chemical resistance
- Excellent abrasion resistance
- Good balance of physical properties
- Good general grade for FDM

**Users**
- All users

**Available Sizes**
- 1.75 mm
- 3 mm (Filament diameter measures 2.88 mm)

**Individual Packaging Stock**
- 1 kg reels

**On Request**
- 0.5 kg reels
- 5 lb reels
- 10 lb reels (lead time maybe longer)
- 15 lb reels (lead time maybe longer)
- 30 lb reels (lead time maybe longer)
- Koils™ in various weights

**Full Box Packaging**
- 0.5 kg reels packaged 14 to a box
- 1 kg reels packaged 12 to a box
- 5 lb reels packaged 6 to a box

_Each box contains the same material, size and color. All filaments are vacuumed sealed with desiccant._

**Tolerances**
- + 0.003” / -0.003”

**Recommended Printer Specifications**
- Optimal Print Temp: 230°C – 260°C
- Optimal Bed Temp: 70°C – 100°C

**Quality**
- All Keene Village Plastics 3D printer filaments are manufactured in Barberton, Ohio, USA with top quality raw materials and 3-Axis laser-controlled precision providing the highest class of products for the 3D printing industry.