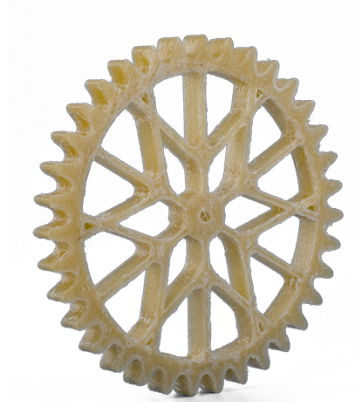# Mosaic PEKK

Technical Data Sheet

Compatible with Element HT & Array

Description

Mosaic PEKK is a high-performance thermoplastic material with exceptional mechanical properties, making it perfect for demanding applications in various industries. It offers several advantages over PEEK and PEI 9085, including improved printability, greater resistance to certain chemicals, and better abrasion resistance. These qualities make it an excellent choice over PEEK and PEI for many applications.

Key Features

- ✓ High Chemical Resistance
- ✓ High Mechanical Resistance
- ✓ Very High Thermal Resistance
- ✓ Flame Resistant
- ✓ Great Printability

Sample Applications

- ✓ Medical Tools
- ✓ Automotive Parts
- ✓ Chemical Processing
- ✓ Aerospace Components
- ✓ Oil and Gas Tooling

Available Colours

Natural

Filament Specifications

Diameter	Tolerance
1.75 mm	+/- 0.05 mm

Printing Guidelines

Slicer Profile	Coming soon to canvas3d.io
Nozzle Temperature	360°C
Heated Chamber	Required
Build Surface	Element Bed Type II with glue stick
Special Considerations	N/A

Note: For best results, parts should only be printed one at a time. If more parts are printed at once, the interlayer adhesion becomes significantly weaker.

Storage/Handling Considerations

Hygroscopicity	High
Drying Temperature	120°C
Drying Time	4 Hours

Note: When not in use, spool should be stored in a Mosaic Material Pod or inside a vacuum sealed container.

Material Properties

Property	Standard	Typical Value
Density	ISO 1183	1.27 g/cc
Tensile Strength, Break	ISO 527	103.04 MPa
Tensile Modulus	ISO 178	2698 MPa
Elongation at Break	DSC	9.52°C
Heat Deflection Temp.	ISO 75 0.45MPa	149.2°C

Multi-Material Compatibility

Automation

Same-material Automated Changeover	With Material Pod

Supports

Same-material support	Yes
Compatible Soluble Materials	None
Compatible Breakaway Materials	None