

# Mosaic Matrix

## DESCRIPTION

Matrix is a proprietary blend of carbon fiber nylon that is optimized for printing on Element. This material has a high strength-to-weight ratio and excellent wear resistance. The addition of carbon fiber makes layer lines almost indistinguishable, yielding parts with high aesthetic quality.

## KEY FEATURES

- ✓ Stiff
- ✓ Strong
- ✓ High thermal resistance
- ✓ High strength-to-weight ratio
- ✓ Excellent surface quality

## SAMPLE APPLICATIONS

- ✓ Structural parts
- ✓ Automotive Parts
- ✓ Aerospace Components
- ✓ Protective casings
- ✓ Robotic components



## FILAMENT SPECIFICATIONS

Diameter	Tolerance
1.75 mm	+/- 0.05 mm

## PRINTING GUIDELINES

Slicer Profile	Available on canvas3d.io
Nozzle Temperature	280°C
Heated Chamber	Recommended
Build Surface	Element Bed Type I, with glue stick
Special Considerations	N/A

## STORAGE/HANDLING CONSIDERATIONS

Hygroscopicity	High
Drying Temperature	100°C
Drying Time	8 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	1.03 g/cc
Tensile Strength, Break	ISO 527	80.43 MPa
Tensile Modulus	ISO 527	4634 MPa
Elongation at Break	ISO 527	7.01%
Heat Deflection Temp.	ISO 75 (@1.8MPa)	101.6°C

MULTI-MATERIAL COMPATIBILITY

AUTOMATION

Same-material Automated Changeover	With Material Pod
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SUPPORTS

Same-Material Support	Yes
Compatible Soluble Materials	Dissolve LT (Water-soluble)
Compatible Breakaway Materials	None

CONTACT INFORMATION

Technical Point of Contact

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