



# MAKERBOT SPECIALTY PETG

SUPERIOR PART DURABILITY AND CHEMICAL RESISTANCE



The first advanced material in the METHOD Speciality Material line for professionals.

PETG is the material of choice for printing high-performance parts that demand excellent durability along with temperature, moisture, and chemical resistance. Engineers and designers use PETG to produce durable prints with speed and agility that can withstand industrial applications including functional prototypes, jigs and fixtures, and end-use parts.

- Excellent mechanical properties, including high durability and toughness: 8.1 kJ/m<sup>2</sup> Impact Strength (ISO 179)
- Higher heat resistance than both PLA and Tough: 70C Heat Deflection Temperature (ASTM 648)
- Chemical resistance to acidic and alkali compounds
- Moisture Resistant: 1104 ppm moisture absorption (ISO 62)
- Prints with water-soluble PVA supports

# PETG

## SUPERIOR PART DURABILITY AND CHEMICAL RESISTANCE

### FUNCTIONAL PROTOTYPES

Designers and engineers can create functional prototypes that combine superior part durability with temperature, moisture, and chemical resistance.

Applications include:

- Liquid containers
- Signage and graphic displays
- Enclosures for electrical equipment

### JIGS & FIXTURES

Machinists and manufacturing engineers can create durable custom parts that are heat and chemical resistant with speed and agility.

Applications include:

- Manufacturing tools and aids
- Robotic end effectors
- Product testing tools

### END-USE PARTS

Engineers and machinists can create functional end-use parts with durability and ductility including snap fits and living hinges.

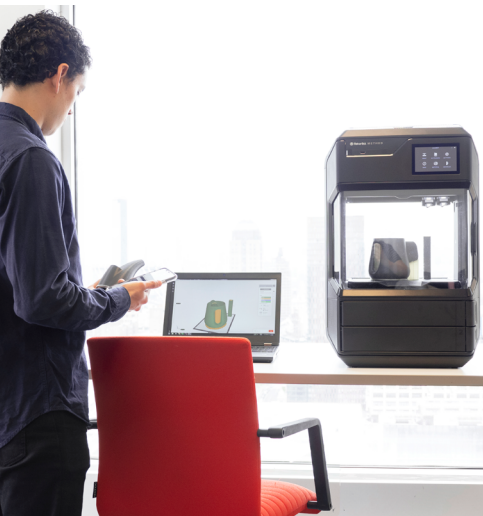
Applications include:

- Custom machine parts
- Protective guards
- Cooling tubes

## TECH SPECS

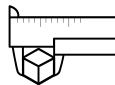
### PERFORMANCE PROPERTIES

	Imperial	Metric
Moisture Resistance (ISO 62)	1104 ppm	1104 ppm
Heat Deflection (ASTM 648)	158F	70C
Flexural Strength (ISO 178)	10007 psi	69 MPa
Flexural Modulus (ISO 178)	297,327 psi	2050 Mpa
Tensile Strength at yield (ISO 527)	7251 psi	50 Mpa
Tensile Modulus (ISO 527)	292976 psi	2020 MPa
Strain at Yield - Elongation (%)	6%	6%
Impact Strength (Charpy Method 23C)	3.85 ft-lb/in2	8.1 kJ/m <sup>2</sup>



## MAKERBOT METHOD

MakerBot METHOD was developed from the ground up leveraging industry-leading Stratasys® patents including a heated build chamber, precision dissolvable supports, and dry-sealed material bays. Engineers and designers use METHOD to create prototypes, jigs and fixtures, and end-use parts.



**INDUSTRIAL RELIABILITY + PRECISION**



**FASTEST CAD TO PART**



**MAXIMUM INNOVATION + MINIMAL INVESTMENT**

MakerBot Specialty Materials are intended for users looking for advanced material properties. They provide basic print performance and can require additional workflow steps to print successfully. PETG requires the application of an adhesion stick to the build plate prior to printing.