

# Ultem 9085

## Product Description

**ULTEM 9085** is a flame-retardant high-performance thermoplastic, PolyEtherImide blend product. It is ideal for the transportation industry due to its high strength-to-weight ratio and its FST (flame, smoke and toxicity) rating. This unique material's certifications make it an excellent choice for the commercial transportation industry. It meets stringent aerospace industry requirements.

PHYSICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Density	ASTM D792	g/cm <sup>3</sup>	1.34
Glass transition temperature	DSC, 10°C /min	°C	186
Heat Deflection Temperature	ASTM D648, 1.82MPa, 3.2mm	°C	153

MECHANICAL PROPERTIES <sup>1</sup>	TEST METHOD	UNITS	TYPICAL VALUE
Tensile strength	ASTM D638	MPa	86
Young's modulus	ASTM D638	MPa	2230
Elongation at break	ASTM D638	%	4.5
Flexural strength	ASTM D790	MPa	116
Flexural modulus	ASTM D790	MPa	2340
Impact strength	ASTM D256, notched	J/m	115

Note:

- All testing specimens were printed using a FUNMAT HT 3D PRINTER under the following conditions:  
Printing temperature = 360 °C, printing speed = 45 mm/s, number of shells = 2, and 100% infill.

## Disclaimer

The typical values presented in this document are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts properties can be impacted by, but not limited to, part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

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