

ULTEM 1010

ULTEM 1010 is a high-performance thermoplastic, PolyEtherImide (PEI), which offers excellent strength, thermal stability and the ability to withstand steam autoclaving. ULTEM 1010 offers the high heat resistance, chemical resistance and tensile strength and is ideal for aerospace, automotive applications and other areas.

PHYSICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Density	ASTM D 792	g/cm ³	1.27
Glass transition temperature	DSC, 10°C /min	°C	215
Heat Deflection Temperature	ASTM D 648, 0.45MPa,6.4mm	°C	207
Flame Classification	UL 94	—	V0(1.5mm), V0, 5VA(3mm)
Water Absorption	ASTM D 570, 24hours	%	0.25
	ASTM D 570, Equilibrium, 23°C	%	1.25
Hardness	Rockwell M	—	109

MECHANICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Tensile strength	ASTM D638	MPa	90
Young's modulus	ASTM D638	MPa	3427
Elongation at break	ASTM D638	%	3.3
Bending strength	ASTM D790	MPa	126
Bending modulus	ASTM D790	MPa	3197
Impact strength	ASTM D256, notched	J/m	32

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 impact by, but not limited to, part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of INTAMSYS materials for the intended application. INTAMSYS makes no warranty of any kind, unless announced separately, to the fitness for any particular use or application. INTAMSYS shall not be made liable for any damage, injury or loss induced from the use of INTAMSYS materials in any particular application.