


## Stratasys® Ultem 9085 for Rapid Prototyping

Categories: [Polymer](#); [Rapid Prototyping Polymer](#); [Thermoplastic](#); [Polyetherimide](#)

**Material Notes:** ULTEM® 9085 is a flame retardant high performance thermoplastic for direct digital manufacturing and rapid prototyping. It is ideal for the transportation industry due to its high strength-to-weight ratio and its V0 rating for FST (flame, smoke, and toxicity). This unique material's preexisting certifications make it an excellent choice for the commercial transportation industry – especially aerospace, marine and ground vehicles. Combined with a Fortus 3D Production System, ULTEM 9085 allows design and manufacturing engineers to produce fully functional parts that are ideal for advanced functional prototypes or end use without the cost or lead time of traditional tooling.

Information provided by Stratasys.

**Vendors:** [Click here to view all available suppliers for this material.](#)

 **New suppliers have been added for this product during the past 60 days.**

Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Specific Gravity	1.34 g/cc	0.0484 lb/in <sup>3</sup>	
Mechanical Properties	Metric	English	Comments
Tensile Strength @ Yield	71.64 MPa	10390 psi	
Elongation at Yield	5.90 %	5.90 %	
Tensile Modulus	0.00222 GPa	0.322 ksi	
Flexural Modulus	2.500 GPa	362.6 ksi	
Flexural Yield Strength	115 MPa	16700 psi	
Izod Impact, Unnotched	6.14 J/cm	11.5 ft-lb/in	
Izod Impact, Notched	1.07 J/cm	2.00 ft-lb/in	
Thermal Properties	Metric	English	Comments
Transformation Temperature, Tg	186 °C	367 °F	
Deflection Temperature at 1.8 MPa (264 psi)	153 °C	307 °F	
Oxygen Index	49.0 %	49.0 %	
Descriptive Properties			
FAA Flammability	<5		FAR 25.853, method A/B
OSU Peak Heat Release	36 kW/m <sup>2</sup>		FAR25.853, 5 min test
OSU Total Heat Release	16 kW-min/m <sup>2</sup>		FAR25.853, 2 min test
Vertical Burn	passes at 2 seconds		Test at 60s

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