

MAKE IT STRONG MAKE IT ULTEM™ RESIN



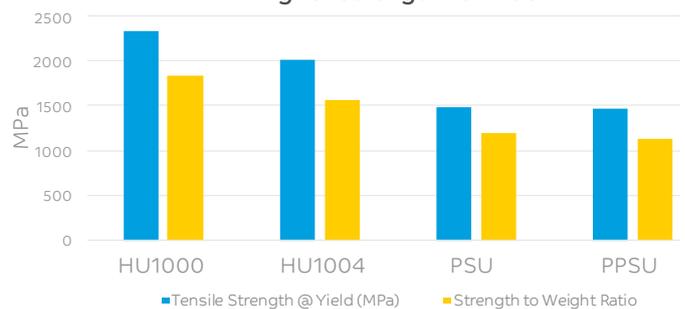
With high compression strength and rigidity even at thin gauges, ULTEM resin is among the most dimensionally stable thermoplastics available. Designing with ULTEM resin can help you to achieve stiffness and precision control comparable to metal.

ULTEM resin’s superior strength to weight ratio and higher tensile strength helps to ensure durability and functionality, contributing to a longer useful life. With ULTEM resin, you can enjoy the design freedom to manufacture light weight complex components that can offer better usability and ergonomics, and that are easier and faster to produce versus metal leading to potential cost savings.

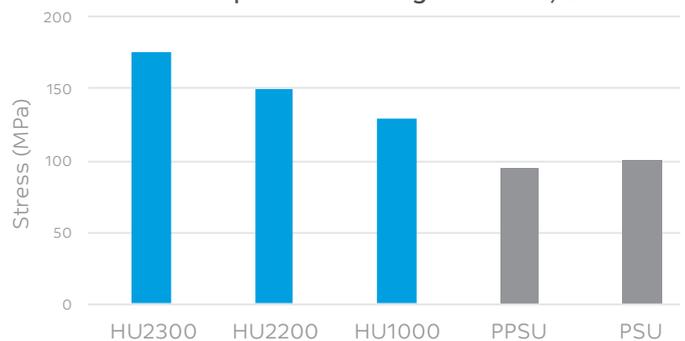
Unfilled ULTEM HU1000 resin has 26% higher compression strength vs PPSU, helping to enable efficient transfer of force and minimize compression under load.

When even higher compression strength is required, glass fiber reinforced grades HU2200 or HU2300 resin are well-suited options.

ULTEM HU1000 resin exhibits up to 38% higher strength vs PPSU



Compression Strength at Yield, 23°C



WHAT APPLICATIONS DO YOU SEE FOR ULTEM RESIN?

You can rely on the strength, stiffness and precision control of devices made with ULTEM resin. These properties make it a material of choice for demanding high precision applications such as surgical device handles, skin staplers, scalpels, drug delivery devices, and patient testing equipment.

PROPERTY	UNIT	ULTEM HU1000 RESIN	ULTEM HU1004 RESIN	ULTEM HU2300 RESIN
MECHANICAL				
Flexural modulus, 1.3 mm/min, 50 mm span (ASTM D790)	MPa (KPSI)	3200 (464)	3000 (435)	9700 (14100)
Tensile Modulus, 5 mm/min (ASTM D638)	MPa (KPSI)	3350 (486)	2900 (421)	10400 (1510)
Tensile Strength at yield Type I, 5 mm/min (ASTM D638)	MPa (KPSI)	110 (160)	95 (141)	175 (254)
Tensile Strain, brk, Type I, 5 mm/min (ASTM D638)	%	60%	85%	2.50%
Izod Impact, Reverse Notched, 3.2 mm (ASTM D256)	J/m (ft-lb/in)	1335 (25)	3300 (62)	470 (8.8)

READY TO LEARN MORE?

Contact us to request our 16-page performance data flyer for medical devices: **make it POSSIBLE | make it ULTEM resin**

CONTACT INFORMATION

SABIC SPECIALTIES BUSINESS

AMERICAS

E: Specialties.Americas@sabic-hpp.com
T: +1 800 845 0600

ASIA PACIFIC

E: Specialties.Asia@sabic-hpp.com
T: +86 400 833 1033

EUROPE

E: Specialties.EMEA@sabic-hpp.com
T: +36 1 288 3040



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MEDICAL DEVICES

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