

# CONSIDER ULTEM™ RESINS AS AN ALTERNATIVE SOLUTION TO SULFONE POLYMERS

ULTEM™ resin has the potential to serve as an alternative material to sulfone polymers and supports certifications for a variety of industry segments. Leverage the many benefits ULTEM resin offers for your high performance applications.

## A POTENTIAL SOLUTION FOR A VARIETY OF INDUSTRIES



MOBILITY



CONNECTORS



WATER



FOOD SERVICE



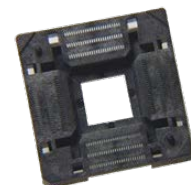
HEALTHCARE



AEROSPACE



5G ANTENNAS /  
RADOMES



SEMI-  
CONDUCTORS

### ULTEM RESIN OFFERS:

- Lead times of approximately 4 weeks\*
- Up to 55% higher stiffness
- Better dimensional stability vs. PSU
- Excellent property retention at elevated temps:  
T<sub>g</sub> - 217°C, HDT @ 1.80 MPa: 190°C
- Up to 17% lower CTE than PES/PPSU
- Chemical resistance
- Metal plating compatibility
- Compatibility with multiple sterilization methods
- Availability for stock shapes & films

\* Lead times subject to change.

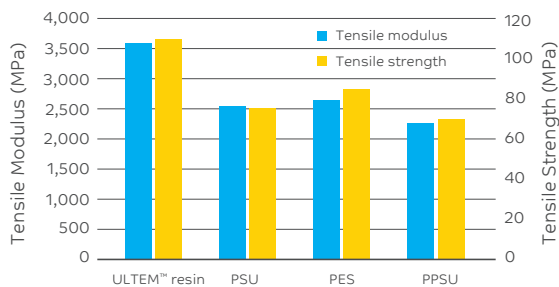
### CASE STUDY:

#### PES TO ULTEM RESIN CONVERSION

Our customer observed improvements in the following areas:

- ~7% lower specific gravity:  
decreases material needed to make parts
- ~6% production yield increase:  
ULTEM resin ~94% useable yield vs. PES ~88%
- ~6% increase in machine throughput
- Increased confidence in supply chain

## MECHANICAL PERFORMANCE



## CHEMICAL RESISTANCE

	ULTEM™ resin	PES	PSU	PPSU
Aromatic Hydrocarbons	3	1	1	4
Aliphatic Hydrocarbons	10	10	7	10
Chlorinated Hydrocarbons	3	3	1	5
Alcohols	10	7	7	10
Inorganic Base	1	10	10	10
Acetates / Ketones	4	1	1	4
Acids	7	7	7	7

(1=poor; 10=excellent)

### ULTEM RESIN MAY SUPPORT:

- Electrical: UL94 V0 & 5VA, UL94 F1, UL746B
- Telecom: Telcordia GR-326, TIA/EIA-604-10A
- Mobility: FMVSS, IATF 16949, ISO 14001
- Food Service: FDA, NSF, EFSA, JHOSPA
- Water: NSF, WRAS, KTW
- Semiconductors: FM
- Healthcare: ISO 10993, FDA, USP Class VI, compatible with multiple sterilization methods
- Aerospace: ABD 0031, BMS, FAR25.853, OSU 55/55 & NBS smoke density tests

## CONTACT INFORMATION

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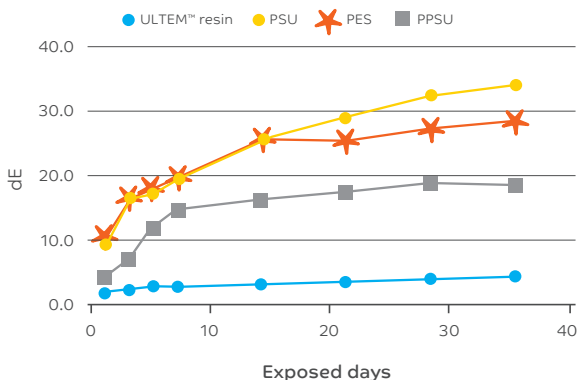
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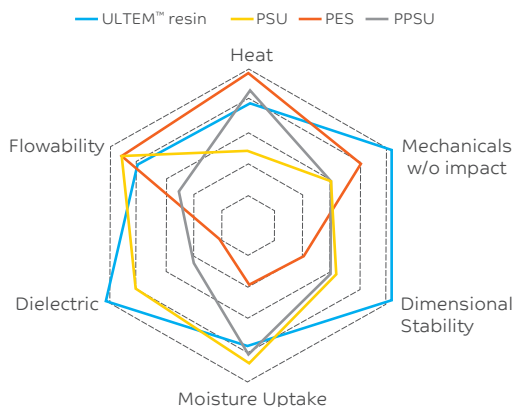
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## UV RESISTANCE (ASTM G26)



## ULTEM™ RESIN VS. SULFONE POLYMERS



**SABIC MATERIAL FINDER**  
Find the right Specialties material  
for your application ▶



ULTEM, SILTEM, EXTEM  
RESINS

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