

INNOVATIVE ULTEM™ RESINS FOR ADVANCED CONNECTORS

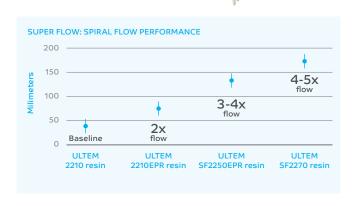
SABIC's most recent ULTEM resin solutions address some of the toughest challenges facing the connectors market today, such as miniaturization and densification. Leverage the benefits of our latest materials which offer excellent flow, enhanced plateability and low CTE. These resins are also available in a bio-based option to help our customers achieve their net zero carbon goals.

THIN WALL HIGH PRECISON CONNECTORS

SABIC's glass fiber reinforced Superflow ULTEM SF2250EPR and SF2270 resins feature exceptional flow properties for molding thinwall, high-precision connectors, such as miniaturized burn-in test sockets (BiTS).

Superflow ULTEM resin offers:

- Up to 5x times higher flow than standard 20% glass filled ULTEM resin, to mold fine pitch thin designs
- Balanced flow, ductility and weld line strength
- Inherent flame resistance, UL94 V-0 @1.5mmin for black and natural colors
- Chemical resistance against solvents and detergents
- · Low outgassing and high cleanliness
- · Low and stable dielectric properties, Dk and Df



EMI SHIELDING & EXCELLENT SURFACE APPEARANCE

New, enhanced plateable ULTEM EPR resins use the standard ABS electroless plating processes. Components made with plated ULTEM $^{\text{TM}}$ resins may have outstanding metallic qualities that provide robust EMI shielding and excellent surface appearance.



ULTEM EPR resin offers:

- Excellent metal adhesion after UV, humidity and thermal shock
- Plates using standard ABS processes
- Supports a wide variety of conductive metal coatings
- 2X improved flow vs. standard glass filled ULTEM resin
- Low CTE and exceptional dimensional stability
- Supports high temperature and harsh environmental exposure
- Light weight, design freedom, efficient & cost effective vs. metal

LOW CTE AND BIO-BASED ULTEM™ RESINS

NEW LOW CTE, IR TRANSPARENT ULTEM 3310TD RESIN

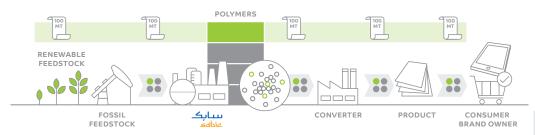
Single mode optical interconnection requires high dimensional stability for lens alignment to the fiber. ULTEM 3310TD resin is a lower coefficient of thermal expansion (CTE) solution that provides an alternative to aspherical glass lenses, helping to lower system costs and increase design flexibility.

ULTEM 3310TD resin offers:

- ~30 % CTE reduction vs. ULTEM 1000 resin
- ~85 % near infrared light transmission
- < 10 % near infrared haze

SABIC ISCC+ CERTIFIED RENEWABLE ULTEM RESIN SOLUTIONS

A new portfolio of bio-based ULTEM resins that delivers a lower carbon footprint while offering exactly the same high performance and processability as incumbent ULTEM materials.



10.2% **Global Warming Potential**



For every $100\,kg$ of this ULTEMTM resin, $25.5\,kg$ of oil-based materials have been replaced by bio-based materials, based on mass balance approach.

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