When E&E gets tough, Ultrason® gets going!

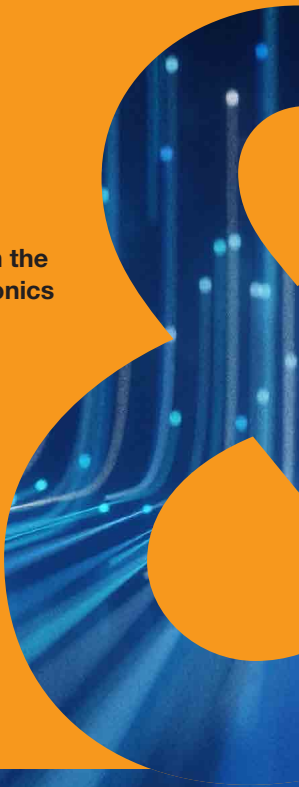
Ultrason® – for your special component in the E&E industry

BASF
We create chemistry

ULTRASON® FOR HIGH-PERFORMANCE E&E PARTS WITH A SPECIAL PROPERTY PROFILE

More data, less space – put in a nutshell, this is the major trend in the electrical engineering and electronics (E&E) industry.

Smaller and thinner parts have to be incorporated into more compact application designs to save energy and assembly space while at the same time the power and data flow rates increase.



If you want to develop lighter, energy-efficient and smarter devices with special demands on thermal management and mechanical performance, then **Ultrason®** is the ideal material for you!

With its high-performance specialty polymer (PSU, PESU, PPSU), BASF offers a tailored E&E portfolio which opens **new possibilities for challenging and special components** in data/energy transmission and storage, for semi-conductors and consumer electronics.

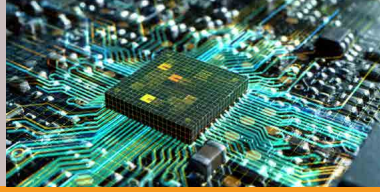
YOUR SPECIAL E&E BENEFITS WITH ULTRASON®

- Excellent durability and reliability
- Outstanding thermal management
- Advanced miniaturization
- Better functional integration
- High design flexibility
- Increased energy efficiency
- Versatile colorability

THE UNIQUE PROPERTY PROFILE OF ULTRASON® FOR E&E

BASF's Ultrason® grades (PAES: polyarylethersulfones) are amorphous, high-performance polymers with **excellent temperature and chemical resistance** as well as a good electrical performance. Their unique feature: a high dimensional stability and very good mechanical properties that are substantially independent of temperature.

- Outstanding resistance to high heat and humidity
- Excellent mechanical strength over a wide temperature range from -50 to +180°C
- Very good dimensional stability, low coefficient of thermal expansion (CTE)
- Inherent flame-retardancy
- Superior chemical resistance
- Good electrical insulation
- Favorable dielectric properties
- Low outgas for clean processes
- Very good transparency
- UL listing



FOR SPECIAL E&E COMPONENTS

Because of its exceptional property profile, the Ultrason® grades enhance the robustness, durability and reliability of today's and next generation E&E components to **advance digitalization, big data and e-mobility**. They are especially suited where other plastics fail to meet increased performance requirements.

FOR ENERGY AND DATA MANAGEMENT:

- Optical transceivers
- Wires and cables
- Circuit breakers
- Capacitors
- Sensors
- Optical fiber connectors

FOR SEMI-CONDUCTORS:

- Test and burn-in sockets
- Wafer carrier
- IC trays

FOR CONSUMER ELECTRONICS:

- SIM card holders
- Hard disk drive (HDD) components

…AND FOR THE DEMANDING APPLICATIONS THAT WE DON'T EVEN KNOW OF TODAY.

TAILORED ULTRASON® GRADES FOR SPECIAL E&E CHALLENGES

Ultrason® E 1010	Injection-molding grade of low viscosity and good flowability
Ultrason® E 2010	Standard injection-molding grade of medium viscosity
Ultrason® E 3010	Higher viscosity injection-molding and extrusion grade with improved toughness and chemical resistance (stress crack resistance)
Ultrason® E 2010 G4 un	Medium viscosity injection-molding grade of high modulus and strength, reinforced with 20 % glass fiber
Ultrason® E 2010 C6	Medium viscosity injection-molding grade of extreme high modulus also at temperatures up to 200 °C
Ultrason® S 2010	Injection-molding grade of low viscosity and good flowability
Ultrason® P 3010	Medium viscosity injection-molding and extrusion grade with superior toughness and chemical resistance (stress crack resistance), resistant against superheated steam
Ultrason® D 1010 G6 U40	Low viscosity injection-molding grade of high modulus, strength and increased CTI (=200), reinforced with 30 % glass fiber

Further information on Ultrason®:
www.ultrason.basf.com

For technical questions, please contact the Ultraplaste-Infopoint
ultraplaste.infopoint@basf.com

Explore the full potential of Ultrason® and find the suitable grade for your application!
Ultrason® Product Selector on www.ultrason.basf.com

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out own investigations, and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. (March 2023)