

PRESS RELEASE

San Antonio, Texas, March 5, 2018

SABIC EXPANDS UNIQUE HIGH-TEMPERATURE FILM PORTFOLIO WITH LAUNCH OF NEW 7 MICRON ULTEM™ DIELECTRIC FILM FOR HIGH-VOLTAGE APPLICATIONS

SABIC, a global leader in the chemical industry, is introducing here at APEC 2018, in booth #1728, a new 7µm (micron) ULTEM™ UTF120 polyetherimide (PEI) dielectric film for high-temperature, professional-grade capacitor applications. This advanced new material targets increasingly higher-voltage applications that require thicker film with greater storage capacity. The new 7µm ULTEM UTF120 film is the second product in a planned portfolio of high-performance SABIC dielectric films featuring different thicknesses to help meet customers' specific voltage requirements. SABIC, which launched a 5µm ULTEM UTF120 film last year, is the only materials supplier offering extruded PEI film at these thicknesses.

“Our new 7µm ULTEM UTF120 PEI film is yet another example of how SABIC is continuing to invest in next-generation film technologies for power electronics that can meet tough, ever-changing electrical application challenges,” said Stephanie Gathman, director, Emerging Applications, SABIC. “It also underscores the commitment to our customers by illustrating our ability to understand their needs and address evolving market trends – such as the move to wide-bandgap semiconductors. We aim to deliver products that can support a full range of capacitor voltages and energy densities.”

To share industry trends driving development of this new material, SABIC Application Development Technical Specialist Neal Pfeiffenberger, Ph.D., is giving a talk at APEC 2018. He will speak on “ULTEM™ UTF120 High Temperature Dielectric Film for Capacitor Applications” on Wednesday, March 7, at 12:00 p.m., in session room 217C.

Unique Capacitor Solution

New 7µm ULTEM UTF120 PEI dielectric film enables the design of lightweight, compact, high energy density capacitors that can store large amounts of electrical energy for long periods without significant current leakage or loss of charge at high temperatures. This technology can offer proven advantages for capacitor applications, beginning with excellent dielectric and insulative properties. It also maintains low heat loss at target frequencies.

In the event of breakdown caused by excessive voltage, the new ULTEM film is self-healing, which allows the capacitor to continue functioning. These self-healing properties surpass those of polyphenylene sulfide (PPS), a competitive and lower-performing high-heat material.

With a temperature range of -40°C to 150°C, ULTEM UTF120 film exceeds the temperature performance of commodity capacitor materials such as polypropylene (PP) and polyethylene terephthalate (PET) film, making it potentially suitable for demanding applications such as DC-DC converters and electric compressors for electric vehicles. Because the ULTEM UTF120 film can handle higher temperatures, it can reduce or eliminate the need to actively cool converter capacitors by way of a secondary source. Cooling loops, for example, traditionally used to reduce temperatures for PP and PET film capacitors, take up precious under-hood space and can constrain design flexibility. Additionally, capacitors using ULTEM UTF120 film are also capable of passing industry-standard 260°C reflow soldering processes.

SABIC 7µm ULTEM UTF120 film also provides excellent handling through metallization, capacitor winding and flattening (squashing). It can be processed on existing equipment and has been validated with both film-foil and metalized electrodes, including flat, tapered and patterned metalized electrode designs.

SABIC's growing ULTEM UTF120 film portfolio is commercially available worldwide and is on display at the company's booth for the duration of APEC 2018.

END

NOTES TO EDITORS

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- High-resolution photos are available upon request.
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NOTE TO EDITORS ABOUT SABIC AT CHINAPLAS AND NPE 2018

SABIC will exhibit at Chinaplas 2018 (booth #6.2G51) in Shanghai, China, from April 24-27, 2018, and at NPE 2018 (booth #S19001) in Orlando, Fla., USA, from May 7-11, 2018. At both events, the company will share new developments and showcase a range of innovative solutions from both its petrochemicals and specialty plastics portfolios for end-use applications across multiple industries, including transportation, building & construction, healthcare, consumer, electronics & electrical, and packaging.

ABOUT SABIC

SABIC is a global leader in diversified chemicals headquartered in Riyadh, Saudi Arabia. We manufacture on a global scale in the Americas, Europe, Middle East and Asia Pacific, making distinctly different kinds of products: chemicals, commodity and high performance plastics, agri-nutrients and metals.

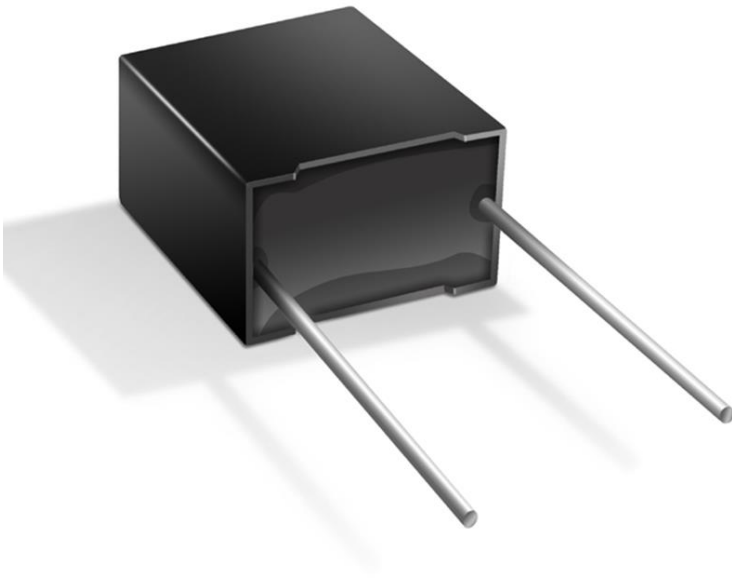
We support our customers by identifying and developing opportunities in key end markets such as construction, medical devices, packaging, agri-nutrients, electrical and electronics, transportation and clean energy.

SABIC recorded a net profit of SR 17.8 billion (US\$ 4.8 billion) in 2016. Sales revenues for 2016 totalled SR 132.8 billion (US\$ 35.4 billion). Total assets stood at SR 316.9 billion (US\$ 84.5 billion) at the end of 2016. Production in 2016 stood at 72.7 million metric tons.

SABIC has more than 35,000 employees worldwide and operates in more than 50 countries. Fostering innovation and a spirit of ingenuity, we have 12,191 global patent filings, and have significant research resources with innovation hubs in five key geographies – USA, Europe, Middle East, South Asia and North Asia.

The Saudi Arabian government owns 70 percent of SABIC shares with the remaining 30 percent publicly traded on the Saudi stock exchange.

PHOTOS AND CAPTIONS



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SABIC Media Contacts

Deborah Kelley

E: Deborah.kelley@sabic.com

T: +1 518-475-3588

AH&M, Inc.

Amy Godfrey

E: agodfrey@ahminc.com

T: +1 413 448 2260, 370

For high resolution photos please contact: Amy Godfrey (agodfrey@ahminc.com, +1 413 448 2260, x370).