

PRESS RELEASE

HOUSTON, TEXAS, August 26, 2020

SABIC TO EXPAND CAPACITY IN ASIA FOR NORYL[™] SA9000 RESIN USED WORLDWIDE IN COPPER-CLAD LAMINATES TO SUPPORT 5G INFRASTRUCTURE GROWTH

SABIC intends to boost production capacity for its specialty NORYL[™] SA9000 resin to support rapid growth of highperformance printed circuit boards (PCBs) used in 5G base stations and high-speed servers. It is anticipated that this latest expansion, which builds on 2019 increases, will nearly double regional production in Asia and increase overall NORYL SA9000 resin production in Asia tenfold vs. 2018 levels.

The incremental gain in capacity will help to reduce global lead times for manufacturers of high-performance copperclad laminates (CCLs), which can provide them greater flexibility to meet customer requests for quick turnarounds. Additionally, it provides capability for future product development. The expansion project is currently underway in India, with completion expected by the end of 2020.

NORYL SA9000 resin is an important component in CCLs used worldwide in PCBs for the 5G infrastructure market, which is forecast to register a 53 percent CAGR between 2020 and 2025, as reported by <u>Mordor Intelligence</u>.

"SABIC continues to invest in specialized materials that help advance global adoption of 5G networking," said Scott Fisher, business director, Specialties, SABIC. "As the wireless networking industry faces rising demand for infrastructure with high expectations for speed, bandwidth and low latency, SABIC is committed to delivering the unique material solutions our customers need to help drive this technology forward."

Creating a Building Block for 5G PCBs

Specialized PCBs used in 5G network infrastructure require copper clad laminates that address the need for high speed and low insertion loss at higher frequencies. High-performance NORYL SA9000 resin is a modified, low-molecularweight, bi-functional oligomer based on polyphenylene ether (PPE). It offers formulators the opportunity to achieve very low loss CCL products while balancing heat resistance, dimensional stability, coefficient of thermal expansion (CTE) and higher layer count capability.

NORYL SA9000 resin provides formulating flexibility in existing CCL production operations. It is soluble in conventional solvents such as toluene and methyl ethyl ketone (MEK) and can be incorporated into various thermoset resin systems such as styrenics, allylic, acrylic, maleimide, methacrylic and unsaturated polyester monomers and resins.

Other Solutions for Thermoset Formulators

In addition to NORYL SA9000 resin, SABIC offers other resins that may help thermoset formulators develop solutions for 5G infrastructure. NORYL[™] SA90 resin provides formulating flexibility in solvent-based epoxy systems to achieve improved dielectric performance while balancing heat resistance, improved toughness and improved dimensional

stability. SABIC's BISDA specialty dianhydride resin can improve dielectric performance and lower water absorption in certain polyimide formulations.

Providing Injection Molding Solutions for 5G Infrastructure

Building out 5G mobile networks to deliver up to 10 times faster speeds than 4G networks requires specialized infrastructure, including huge numbers of small cell base stations. Components for traditional and multiple inputmultiple output (MIMO) style base stations and antennas, such as radomes, dipole resonators, antennae components, fasteners, screws, stand-offs, fittings, phase shifters and radio frequency filter housings, demand high-performance materials to provide the right balance of mechanical, physical, and dielectric properties. SABIC's broad portfolio of injection molding solutions including <u>ULTEM[™] resin</u>, <u>NORYL resin</u>, <u>LNP[™] THERMOCOMP[™] compounds</u> and <u>LEXAN[™] EXL</u> copolymer resin can offer tailored dielectric performance, weatherability, weight-out and increased design freedom to help customers optimize performance in 5G infrastructure applications.

END

NOTES TO EDITORS

- SABIC and brands marked with [™] are trademarks of SABIC or its subsidiaries or affiliates.
- SABIC should be written in every instance in all uppercase.

ABOUT SABIC

SABIC is a global diversified chemicals company, headquartered in Riyadh, Saudi Arabia. SABIC manufactures 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.

SABIC supports its customers by identifying and developing opportunities in key end-use applications such as construction, medical devices, packaging, agri-nutrients, electrical and electronics, transportation and clean energy. Production in 2019 was 72.6 million metric tons.

SABIC has more than 33,000 employees worldwide and operates in around 50 countries. Fostering innovation and a spirit of ingenuity, SABIC has 12,540 global patent filings, and has significant research resources with innovation hubs in five key geographies – USA, Europe, Middle East, South Asia and North Asia.

PHOTOS AND CAPTIONS



SABIC intends to boost production capacity for its specialty NORYL[™] SA9000 resin to support rapid growth of highperformance printed circuit boards (PCBs) used in 5G base stations and high-speed servers.

SABIC Media Contacts

Deborah Kelley E: <u>deborah.kelley@sabic.com</u> T: +1 518 475 3588

Marketing Solutions Kevin Noels E: <u>knoels@marketing-solutions.com</u> T: +32 3 31 30 311

This press release and relevant photography can be downloaded from <u>www.PressReleaseFinder.com</u>. Alternatively for very high resolution pictures please contact: Kevin Noels (<u>knoels@marketing-solutions.com</u>, +32 3 31 30 311).