



Samsung Electronics Successfully Qualifies Chemours' Opteon™ Two-Phase Immersion Cooling Fluid

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Represents a key step in market adoption of Chemours' liquid cooling solution

WILMINGTON, Del.--(BUSINESS WIRE)--Aug. 13, 2025-- The Chemours Company (Chemours) (NYSE: CC), a global chemistry company, announced the successful qualification of its Opteon™ two-phase immersion cooling fluid by Samsung Electronics. This milestone marks a significant advancement in Opteon™ two-phase immersion cooling adoption, ensuring fluid compatibility and performance with current-generation Samsung Solid State Drive (SSD)—a high-performance storage device. Qualification of this critical server component provides increased certainty to server manufacturers, supporting market adoption and ultimately addressing the cooling and energy demands driven by AI and next generation chips.

After completing rigorous testing of Opteon™ two-phase immersion cooling fluid, Samsung successfully qualified the fluid with its generation four SSD. Opteon™ is the first two-phase immersion cooling fluid approved by Samsung; testing for subsequent generations will begin in the months ahead.

"Collaborating with Samsung has enabled us to get an even deeper understanding of the evolving digital infrastructure needs and unique value of our Opteon™ two-phase immersion cooling fluid," said Denise Dignam, Chemours President and CEO. "Our innovative technology offers superior compatibility, enables higher IT loads, with fewer equipment failures, and dramatically less energy and water use—all of which translates to reduced costs for downstream users. We're eager to continue working with Samsung and the broader industry to bring this breakthrough technology to market."

To ensure swift qualification, Chemours and Samsung joined forces with [Liquid Stack](#), a leading tank manufacturer, and [PKI Corporation](#), a regional semiconductor and data center leader, to conduct performance testing using a commercial scale 48U immersion cooling tank. Samsung and PKI established a robust testing and qualification process to support current and future generation qualifications. The equipment met all compatibility targets, with no sign of degradation.

"As digital infrastructure continues to evolve to meet the demands of AI and high-performance computing, compatibility is king," said Sungki Lee, Project Leader of SSD HW Reliability Engineering Team at Samsung Electronics. "Finding innovative solutions to effectively cool IT hardware, without creating compatibility or performance issues, is no simple task. After nearly a year of testing, the Opteon™ two-phase immersion cooling fluid met or exceeded all compatibility parameters. We look forward to our continued collaboration as we qualify our generation five and six SSDs."

Samsung created its own high-reliability test standard—based on Open Compute Project (OCP) standards. The Opteon™ fluid is the first two-phase immersion cooling technology to pass Samsung's test standard. Samsung has developed and implemented a method that achieves world-class heat transfer efficiency while maintaining high reliability in immersion cooling systems using the Opteon™ fluid. This will help accelerate future liquid cooling qualifications across the Samsung Electronics portfolio—including memory semiconductors, such as SSD and DDR modules, and also logic device packages.

Opteon™ two-phase immersion cooling fluid offers a power usage effectiveness (PUE) approaching 1 and superior performance capabilities [compared to traditional or other liquid cooling technologies](#). Nearly eliminating water use, reducing space requirements by 60%, and lowering energy consumption by up to 40% and cooling energy use by up to 90%, this technology represents benefits for data center operators and communities alike.

For more information, visit [Opteon.com](#).

About The Chemours Company

The Chemours Company (NYSE: CC) is a global leader in providing industrial and specialty chemicals products for markets, including coatings, plastics, refrigeration and air conditioning, transportation, semiconductor and advanced electronics, general industrial, and oil and gas. Through our three businesses – Thermal & Specialized Solutions, Titanium Technologies, and Advanced Performance Materials – we deliver application expertise and chemistry-based innovations that solve customers' biggest challenges. Our flagship products are sold under prominent brands such as Opteon™, Freon™, Ti-Pure™, Nafion™, Teflon Viton™, and Krytox™. Headquartered in Wilmington, Delaware and listed on the NYSE under the symbol CC, Chemours has approximately 6,000 employees and 28 manufacturing sites and serves approximately 2,500 customers in approximately 110 countries. For more information, visit [chemours.com](#) or follow us on [LinkedIn](#).

About Samsung Electronics

Samsung Electronics is a global leader in technology, opening new possibilities for people everywhere. Through relentless innovation and discovery, we are transforming the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry, and LED solutions. Samsung is also pioneering advancements in AI, IoT, and

5G, driving the future of connected living.

Our commitment to quality and excellence is reflected in our products and services, which are designed to enhance the lives of our customers. With a presence in over 80 countries, Samsung Electronics is dedicated to creating a better world full of richer digital experiences through innovative technology.

Forward-Looking Statements

This press release contains forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which involve risks and uncertainties. Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to a historical or current fact. The words "believe," "expect," "will," "anticipate," "plan," "estimate," "target," "project" and similar expressions, among others, generally identify "forward-looking statements," which speak only as of the date such statements were made. These forward-looking statements may address, among other things, new product development and expected contributions to advancing the data center energy efficiency, improving sustainability, circularity, decreasing environmental footprint, plans to continue investment in research and development, advancements in liquid cooling technology, partnerships in the liquid cooling and data center industry, all of which are subject to substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. These statements are not guarantees of future performance. Forward-looking statements also involve risks and uncertainties that are beyond Chemours' control. Matters outside our control, including general economic conditions, geopolitical conditions and global health events, and changes in environmental regulations in the U.S. or other jurisdictions that affect demand for or adoption of our products, have affected or may affect our business and operations and may or may continue to hinder our ability to provide goods and services to customers, cause disruptions in our supply chains such as through strikes, labor disruptions or other events, adversely affect our business partners, significantly reduce the demand for our products, adversely affect the health and welfare of our personnel or cause other unpredictable events. Additionally, there may be other risks and uncertainties that Chemours is unable to identify at this time or that Chemours does not currently expect to have a material impact on its business. Factors that could cause or contribute to these differences include the risks, uncertainties and other factors discussed in our filings with the U.S. Securities and Exchange Commission, including in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2025, and in our Annual Report on Form 10-K for the year ended December 31, 2024. Chemours assumes no obligation to revise or update any forward-looking statement for any reason, except as required by law.

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