



Cabot Corporation Launches ENTERA™ Aerogel Particles for Use in Thermal Barriers for Lithium-ion Batteries

May 1, 2023

ENTERA aerogel particles provide formulation flexibility to develop a range of thermal barrier forms for electric vehicle batteries

BOSTON--(BUSINESS WIRE)--May 1, 2023-- [Cabot Corporation](#) (NYSE: CBT) today announced the launch of its new ENTERA™ aerogel particles portfolio. ENTERA aerogel particles are a thermal insulation additive designed to enable the development of ultra-thin thermal barriers for electric vehicle (EV) lithium-ion batteries. In this portfolio, Cabot has launched three ENTERA aerogel products that formulators can incorporate into a range of thermal barrier forms including blankets, pads, sheets, films, foams and coatings.

Vehicle fleets are increasingly transitioning from internal combustion engines to EVs. To meet increased EV demand, battery manufacturers are working diligently to develop higher performing lithium-ion battery packs with increased range. These higher energy batteries require more advanced thermal management solutions, including thermal barriers to mitigate thermal runaway, a rare event in which a battery cell overheats to dangerous levels and the heat propagates to neighboring cells within the module or battery pack due to malfunction or damage. As a result of the potential severe risks from an EV battery fire, additional regulations, such as the United Nations' Global Technical Regulation 20 on Electric Vehicle Safety (UN GTR No. 20) and China's GB 38031-2020, have been implemented to maximize occupant safety. Aerogel has emerged as a leading, performance-enabling thermal barrier material that is enabling EV manufacturers to meet critical industry safety standards.

Cabot's ENTERA aerogel products not only help battery and EV manufacturers comply with these new regulations, but they also provide a lightweight thermal barrier solution that offers low thermal conductivity combined with thermal stability. The [Cabot ENTERA aerogel particles portfolio](#) ranges in size from microns to millimeters and includes ENTERA™ EV5200 aerogel, ENTERA™ EV5400 aerogel and ENTERA™ EV5800 aerogel.

Furthermore, with greater than 90 percent air volume, Cabot's ENTERA aerogel is up to 20 times lighter than traditional insulation additives used in thermal barriers. Using lightweight materials in EVs is important to offset the weight of EV batteries as well as to improve efficiency, extend driving range and increase the lifespan of the battery.

"We have been producing aerogel for 20 years and the expansion of our aerogel capabilities for use in thermal barriers for batteries is a natural progression in our commitment to support the tremendous growth of the battery market," said Jeff Zhu, executive vice president and president, Performance Chemicals segment and Asia Pacific region. "Our new ENTERA aerogel particles provide strong formulation flexibility and play an important role in improving passenger safety, energy efficiency and extended range for EVs. We are committed to developing solutions that solve some of the world's most pressing sustainability challenges and with these new products, we are well positioned to further support the global transition to vehicle electrification and enable a lower carbon future."

Cabot has a full range of products that serves the EV battery market. It is the only global manufacturer with a complete conductive additives product portfolio for battery applications, including conductive carbons, carbon nanotubes, and carbon nanostructures, as well as blends and dispersions of these additives to deliver optimal performance. Conductive additives play a critical role in lithium-ion battery chemistry and provide a pathway for electrons to move within the anode and the cathode which enables charging and discharging. Additionally, Cabot offers fumed alumina for separator and cathode active material coatings.

For more information about Cabot's ENTERA™ aerogel particles portfolio, visit cabotcorp.com/aerogel.

ABOUT CABOT CORPORATION

Cabot Corporation (NYSE: CBT) is a global specialty chemicals and performance materials company headquartered in Boston, Massachusetts. The company is a leading provider of [reinforcing carbons](#), [specialty carbons](#), [battery materials](#), [engineered elastomer composites](#), [inkjet colorants](#), [masterbatches and conductive compounds](#), [fumed metal oxides](#) and [aerogel](#). For more information on Cabot, please visit the company's website at cabotcorp.com.

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995: Statements in the press release regarding Cabot's business that are not historical facts are forward looking statements that involve risks and uncertainties. For a discussion of such risks and uncertainties, which could cause actual results to differ from those contained in the forward looking statements, see "Risk Factors" in the Company's Annual Report on Form 10-K.

View source version on [businesswire.com](https://www.businesswire.com/news/home/20230501005115/en/): <https://www.businesswire.com/news/home/20230501005115/en/>

Emily Moran
Corporate Communications
emily.moran@cabotcorp.com
(617) 460-4517

Steve Delahunt
Investor Relations
steve.delahunt@cabotcorp.com

(617) 342-6255

Source: Cabot Corporation