

Nonwoven Battery Separators Change the Safety Paradigm for Lithium Ion Batteries

Dreamweaver (Brian Morin)

New thermally stable nonwoven battery separators are delivering much improved safety in lithium ion batteries. Made with components that are stable up to 500 C, they are making the separator one of the most thermally stable components in the cell, rather than the least stable. In some tests, this is completely changing the safety paradigm, moving the breakdown from the separator to the thin aluminum layer known as the cathode current collector, which acts much like a fuse in normal electronic circuits. In this presentation, an overview of lithium batteries and separators will be given along with new data detailing the improved safety performance using nonwoven separators.