

As the prevalence of lithium-ion batteries in our daily environment continues to increase, so does the need for a fire protection solution. To capitalize on this growing market, several companies have introduced fire extinguishers to the marketplace that claim to address the multiple hazards associated with lithium-ion thermal runaway/fire events. However, there is no testing standard for these types of hazards, and many of these products present limitations which, among other things, may be hazardous to the first responder.

As an example, one fire extinguisher is advertised to have a 1A rating. This small, water-based product will not meet most existing code requirements for commercial, industrial, and government facility applications. Due to their size, some of these fire extinguishers have a short range, potentially putting the user in harm's way. Additionally, lithium-ion battery thermal runaway/fire events often present multiple hazards which may include Class A, B, C, and even D fire classifications. Pairing an appropriately classified extinguisher with the potential hazard is important. For instance, using a fire extinguisher without a Class C rating on electrically energized hazards may cause an electric shock to the first responder.

Finally, some promote that their fire extinguishers meet the NTA 8133 Dutch technical agreement (commonly known as the "Dutch Standard"), which is a standard that neither the NFPA nor UL recognize. The NFPA 10 technical committee evaluated many public comments related to lithium-ion thermal runaway/fire events and has yet to develop a standard due to the challenges associated with this type of hazard. Amerex remains committed to working with third-party nationally recognized test laboratories and other industry experts to develop standards and solutions for lithium-ion battery hazards, and we will continue to test and develop various fire suppression agents. Read further detail about fire extinguishers and the risks associated with lithium-ion battery fires here.

Ben Pitts

Vice President — Sales and Marketing

Amerex-Fire.com

Ben Pitts