

UL SOLUTIONS CONDUCTS ADDITIONAL TESTING OF THE UL LISTED VICTORY FIRE AVD6L EXTINGUISHER ON LITHIUM BATTERY FIRES



September 15, 2023

The Victory Fire Model AVD6L 6 litre extinguisher was successfully launched at the NFPA show in Las Vegas having proudly earned its UL Listing Mark; the AVD6L model is Listed under file number EX29073 as a water-based agent fire extinguisher. Additionally, the AVD water-based agent intended for Class A Hazards is a UL Recognized Component under file number EX28967.

In the absence of a specific fire class for lithium-ion batteries and as part of its continual product validation program, AVD Fire, in partnership with Victory Fire & Gas Inc, has engaged UL Solutions to conduct testing of the Model AVD6L extinguisher on lithium ion battery fires. Hence, utilizing UL Solutions' testing services, we further assessed the performance of AVD in order to support the launch of the Victory Model AVD6L fire extinguisher in the U.S. The rigorous tests at the AVD Fire test facility assessed the Victory Fire's AVD6L extinguisher performance on battery fires.

The purpose of the testing was to evaluate whether the Model AVD6L, 6 litre portable fire extinguisher, could effectively suppress, extinguish and prevent re-ignition of lithium-ion battery fires with nominal capacities of 440 Wh and 590 Wh.

The battery fire tests were performed in accordance with modifications to the testing outlined in the Dutch technical agreement, NTA 8133. The 9 litre, full NTA test is on a 600 Wh module consisting of 6 LiPo batteries and ignition by overcharging of a central, third battery. The modified testing was scaled down for a 6L fire extinguisher and used a 440 Wh module with lower capacity batteries. The larger 590 Wh battery module used 8 batteries instead of 6 with a central, fourth battery being overcharged.

The NTA test method defines a successful extinguishing event occurs as one where at least one cell is saved, i.e. has a voltage ≥ 3.7 V. For the 440 Wh module, two out of two battery fires were extinguished with 5 batteries (20 cells) and 4 batteries (16 cells) being saved by the AVD agent preventing thermal propagation. For the larger 590 Wh series two out of three fires were extinguished; during the 2 successful tests 4 batteries (16 cells) and 3 batteries (12 cells) were protected from going in to thermal runaway and reigniting.

AVD met the defined test criteria to extinguish, prevent re-ignition and suppress propagation to the other batteries and, hence we deem the AVD6L extinguisher is suitable for use on lithium-ion battery fires.

For further information and support for your lithium battery fire suppression requirements please visit www.victoryfiregas.com or contact us at info@victoryfiregas.com



AVD agent is a UL Recognized Component under file number EX28967



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