

# Thermal Runaway Containment Bags



Federal Aviation  
Administration



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# Background

- **In response to the ongoing threat of thermal runaway in Portable Electronic Devices (PED), many companies have created PED containment products.**
- **There is currently not a standard in place to qualify the performance of any of the products.**
- **UL formed a committee to create a standard.**



# Introduction

- **So far the UL STP 5800 committee has met two times and UL has performed numerous tests in support of development.**
- **Many containment products are created with the intent of containing a device while it is in thermal runaway.**



# Containment Bags

- **Potential concerns with some containment bags if they are used as designed:**
  - Retrieving, opening and operating a containment product will delay response time. Immediate action with cooling is a key component in mitigating thermal runaway propagation.
  - Many products require handling the device. This may increase the potential for injury.
  - Many products trap heat and further increase the likelihood of propagation.

# FAA and Containment Bags

- **SAFO 09013 is still valid and containment bags can be used as long as:**
  - Immediate action of flame extinguishment and sufficient cooling with non-alcoholic liquids has been performed first.
  - At this point, the device should no longer be a threat.



# Questions?

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