



AIR ACTIVATED FLAMELESS RATION HEATER (AAH)

PURPOSE:

Provide the Warfighter an easier to use ration heater for the MRE™ entrée. Unlike the current ration heater, the Air Activated heater does not require water, a valuable battlefield commodity. This new approach to heating and advanced technology aims to lower cost, weight, and logistics burden of chemical heating technologies, while increasing the ease of use and Warfighter acceptance.

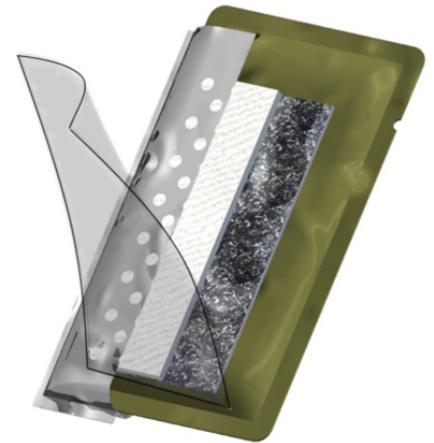


CHARACTERISTICS:

The Air Activated Heater contains a peel away layer that, once removed, allows air to penetrate the holes of the outer foil layer. After passing through the felt diffusion layer, the air reacts with the activated carbon, electrolyte, and rate-controlling binder, producing a safe exothermic reaction. This advanced technology will heat the MRE™ entrée by 100 degrees Fahrenheit in less than ten minutes. Negligible hydrogen off-gassing eliminates operational and transport restrictions associated with the current heater and offers improved safety.

CAPABILITIES & BENEFITS:

- Enhanced user operational safety
- Enhanced ease of use for “heat on the go”
- No loss or degradation of operational capability
- Similar platform to the current Mg-Fe heater
- Eliminates the need to add water for heater activation



TRANSITION:

The objective of this collaborative Army ManTech - Army Small Business Innovation Research project was to advance the manufacturing readiness level, reduce costs, and meet weight, performance and safety metrics. The DoD Combat Feeding Program will transition technical data to Defense Logistics Agency - Troop Support for use with the MRE™. Industry partners expressed interest in use with consumer products (camping, etc.), which includes a potential market for 40 million units per year.

In addition, applications are being explored among the medical community for use as a heater for quick-set casts.

POINT OF CONTACT:

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