



OVERVIEW & INSTRUCTIONS

PRODUCT OVERVIEW

UNIQUE QUALITIES

Unlike foam, E-FireX does not create an expansion blanket that smothers the fire. Instead, it utilizes advanced micro-technology to encapsulate the fuel source of the fire. This encapsulation process isolates and contains the combustible components at a microscopic level, effectively cutting off the fuel from the oxygen it needs to burn, without relying on a physical barrier like foam.

THE VISUAL EFFECT

It resembles a stream of liquid gold-colored water being emitted from firefighting nozzles, whether they are smooth bore or adjustable fog types. This unique appearance is due to the properties of the encapsulating agents within the solution, which also contribute to its effectiveness in a wide range of fire scenarios, including those involving flammable liquids and gases, as well as electrical and metal fires.

COMPREHENSIVE FIRE SUPPRESSION CAPABILITIES

This encapsulator agent is a cutting-edge solution designed to effectively combat Class A, B, C, and D fires. This is crucial as electric passenger vehicle fires can encompass these classes due to the various materials involved, especially the lithium-ion batteries in thermal runaway, which do not respond well to traditional firefighting methods like water.

ADVANCED MICRO-TECHNOLOGY

One of the core innovations is its Encapsulator-Micro Technology. This technology creates stable micelles that can encapsulate combustible and flammable liquids, both nonpolar and polar. It renders these materials non-flammable, non-ignitable, and non-explosive, maintaining this state even under high heat over extended periods.

UNIQUE MECHANISM OF ACTION

Unlike traditional firefighting tools, this product forms a protective cocoon around the heat source upon contact. This encapsulation not only insulates the object from heat and, under certain conditions, electricity, but it also allows for rapid cooling through thermal conveyance—far more efficient than the steam conversion process typical of plain water. This rapid cooling significantly lowers the autoignition temperature of the heat source, effectively disrupting the fire's ability to sustain itself.

BREAKING THE FIRE TETRAHEDRON

E-FIREX works by altering the self-oxidizing fire tetrahedron itself. It breaks the free radical chain reaction that fuels fires and provides permanent burn-back resistance. This approach is vastly different from traditional methods like suffocation with steam or separation using foams and powders.

THE FUTURE OF FIREFIGHTING

Our reliance on outdated synthetic-based fire suppression methods is being challenged by the efficacy and efficiency of this unique product. As we see more electric vehicles and complex industrial processes, the need for advanced solutions like E-FireX becomes ever more apparent. This technology does not merely fight fires—it revolutionizes how we think about firefighting in the modern era. We are at a pivotal moment in the evolution of fire safety technology, and this all-natural encapsulator agent stands at the forefront.