F-500 Encapsulator Technology Useful for Decontamination Process

F-500 Encapsulator Agent (EA) is the premiere UL Listed firefighting agent for use on Class A and Class B fires. It has also been tested for use on Class C and D fires and is very effective. As more hazards are presenting themselves to firefighters, there is a greater risk involved with firefighting. The greatest long term risk that has presented itself recently is cancer. In years past, dirty bunker gear and a grimy face used to be signs of valor and toughness when going back to the firehouse. No longer.

Firefighters are now more directly exposed to dangerous toxins and carcinogens. As such, an increasing wave of fire departments are following strict decontamination protocols following the overhaul of a fire. This practice helps in multiple ways, as firefighters can remove smoke and soot particles from their bunker gear as well as clean the most exposed parts of the gear.

Departments will often spend more money on a cleaning agent specifically for decontamination. With the additional cost of this agent, budgets can quickly be eaten into. F-500 EA can serve a multifunctional role within a firehouse. For one, it is more effective than other agents on the market. Additionally, less water is used and firefighters are in and out of the scene much quicker than when using other agents. This limits exposure to the toxins and carcinogens, and with a disease like cancer, every minute saved can potentially save lives. While performing knockdown, F-500 EA eliminates 98.6% of the toxins in the smoke. This means significantly less exposure while on scene. Less exposure makes the decontamination procedure easier and quicker.

F-500 EA can also be used in the decontamination procedure. 1% of F-500 EA ejected from a TKO Nozzle or a Handy Pack can be used to spray down firefighters in their turnout gear directly after performing overhaul. The F-500 EA will encapsulate the hydrocarbons and toxins left in the soot on the gear. It will also wash the firefighters off and help to get the soot and smoke off of the more exposed areas of their gear. In addition, F-500 EA is non-toxic, non-corrosive, and biodegradable. There is no harm or danger in using F-500 EA as a decontamination agent.

Moreover, transporting gear back to the firehouse for washing will be significantly less harmful. The toxins in smoke can be spread all over a firehouse, and cleaning gear with water will not be nearly as effective for reducing these toxins.
NFPA 1851 addresses cleaning turnout gear. Per Section 7.2.3.6, "Mild detergents with a pH range of not less than 6.0 pH and not greater than 10.5 pH as indicated on the product SDS or original product container shall be used." F-500 EA has a neutral pH of 7 as listed in the SDS Section 9: Physical and Chemical Properties. F-500 EA is incredibly effective for performing knockdown, and also approved by the EPA to be used as a surface washing agent. Save money on multiple agents by using the only agent on the market that can do it all!

Follow your department’s decontamination procedures and do not use F-500 Encapsulator Technology without the proper training. Hazard Control Technologies will be glad to have an Encapsulator Technology Specialist run a demo with your department to ensure proper use of this amazing technology and also share our suggested operating guidelines for decontamination.

ISO 9001 Registration
F-500 EA is manufactured in compliance with HCT’s ISO 9001 Quality System, which ensures customer and end user confidence in consistent, reproducible, traceable and reliable quality processes from production to shipment - 100% of the time.

UL Listed
F-500 EA is listed for Class A and Class B fires.

EPA NCP Product Schedule Listed
F-500 EA is listed on the National Contingency Plan Product Schedule of the U.S. Environmental Protection Agency as a surface washing agent.*

ISO Fire Suppression Rating Schedule Equivalency List
F-500 EA complies with the Insurance Services Office (ISO) Equivalency List as equivalent to foam.

* F-500 EA is on the U.S. Environmental Protection Agency’s NCP Product Schedule. This listing does NOT mean that EPA approves, recommends, licenses, certifies, or authorizes the use of F-500 EA on an oil discharge. This listing means only that data have been submitted to EPA as required by Subpart J of the National Contingency Plan, 40 CFR Section 300.915.