FLUOROTECHNOLOGY FOR FIRST RESPONDER SAFETY APPLICATIONS

FluoroTechnology often represents the difference between life and death for first responders, whether through its use in safety gear or firefighting foams.

The low surface tension and positive spreading coefficient of fluorinated surfactants make them ideal ingredients in the production of firefighting foam, used to fight Class B flammable liquid fires and provide both shorter extinguishment times and critical burnback resistance.

Clothing utilizing FluoroTechnology offers life-saving protection to first responders, whether by helping to deflect bullets or by maintaining performance of protective gear in the extreme environment of a fire.

The use of FluoroTechnology in the emergency services industry supports more than 1,000 jobs in the U.S. and more than 9,000 jobs in Europe. Globally, FluoroTechnology materials and products specific to the emergency services industry generate a total of $15.1 billion in economic output.¹

**High-Performance First Responder Safety Applications**

- Firefighter Turnout Gear
- Bulletproof Vests
- Outdoor Clothing and Equipment
- Chemical Protective Suits
- Firefighting Foams

**FluoroCouncil’s Commitment to Sustainability**

FluoroCouncil and its members are working with regulatory authorities and other stakeholders worldwide to innovate and drive increasingly sustainable FluoroTechnology solutions, including the global transition from long-chain PFAS² to alternatives such as short-chain fluorochemicals. Short-chain fluorochemicals are alternatives to the long-chain PFAS that provide the same valuable properties, but with improved environmental and human health profiles.

All FluoroCouncil companies are charter members of the 2010/2015 PFOA Stewardship Program, a global partnership with U.S. Environmental Protection Agency (EPA) based on goals to eliminate perfluorooctanoic acid (PFOA) and related chemicals from facility emissions and product content by the end of 2015. Similar programs are in place with Environment and Health Canada. A significant volume of data has been developed and rigorously evaluated by industry and regulators, supporting the conclusion that the short-chain alternative substances offer equivalent performance with improved environmental and human health profiles.

According to the U.S. EPA, “data indicate that [shorter-chain chemicals] have substantially shorter half-lives in these animals than PFOA and are less toxic than long-chain PFAC chemicals.”

¹ Based on preliminary estimates of 2013 data by the American Chemistry Council.

² PFAS = per- and polyfluoroalkyl substances