Baum's Castorine Co. Inc. has been manufacturing fire suppression foams since 1980.

Baum's Novacool UEF, a fire extinguishing foam, replaces aqueous film-forming foams and ozone-depleting halon gases, which release both toxic hydrofluoric acid and fluorocarbons into the environment during use.

Aqueous film-forming foams (AFFF's) developed by the U.S. Navy in the 1960's to combat pooled-surface, volatile, hydrocarbon fires release both toxic hydrofluoric acid and fluorocarbons when used. The fluorosurfactant compounds that make these agents so effective against certain types of fires render them resistant to microbial degradation, often leading to contamination of ground water supplies and failure of wastewater treatment systems. Fluorosurfactants are persistent in the environment, and testing has shown then to be bioaccumulative.

Baum's Novacool UEF provides an innovative, highly effective, and environmentally responsible alternative for firefighters. It is effective at approximately one-seventh the concentration of conventional fire fighting chemicals.

Novacool UEF is a mixture of Anionic, Nonionic and Amphoteric surfactants. It does not contain any nonylphenolethoxylates (NPE's) or glycol ethers. Test data shows it to be readily biodegradable. Novacool UEF works in three ways to extinguish a fire: 1). It reduces the surface tension of water to improve the penetrating ability of water, 2). it vastly improves the heat transfer from the fuel into water, 3). and it reduces fuel vapor pressure by emulsifying class B materials at the fuel surface.

This is short explanation of Baum's Novacool selective employment of rapidly biodegradable substances, which dramatically enhances the effectiveness of simple water, while eliminating the environmental and toxic impact of other traditional fire extinguishment agents. Because Baum's Novacool UEF is mixed with water at only 0.4 percent, an 87–93 percent reduction in product use is realized compared to conventional extinguishment agents typically used at 3–6 percent.

Fire affects all elements of industry and society and no one is immune from its dangers.

This unique technology should be deployed at every fire; it was developed in the United States and it is manufactured in the State of New York.

List of potential benefits include but is not limited to:

- When applied as foam through a foaming nozzle or CAFS it can fill voids and stick to a vertical surface.
- Environmentally responsible formula, rapidly biodegradable.
- Contains no alcohols (will not cause AFFF to de-foam).
- Can be mixed with fresh, brackish, or seawater with good foam in all water types.
- Run off is greatly reduced or eliminated due to the reduced amount of water required to extinguish the fire and the wetting properties that keep the water on and in the fuel.
- Will coat class A fuels (even waxy vegetation) to increase moisture content. This will provide a barrier to an oncoming flame front.
- Use concentration 0.4%