



Brand name: Baum's Novacool UEF (Universal Extinguishing Foam).
Application Ratio: 0.4% standard, 1% and 3% optional.
Fire Class Application: Class A, Class B, Class D, pressurized and 3-D fires.
Approvals: Manufactured under NFPA 18, UL classified.
EPA Approval: Please read EPA statement in our "Latest News" section of our website.
Shelf life: 10 years +

Typical usage with 1000 gallons of water

AFFF @ 3% = 30 gallons
AFFF AT @ 6% = 60 gallons
Novacool UEF @ 0.4% = 4 gallons

Typical duration of foam operation

AFFF 3% typical 15 gallon storage tank @ 125 gal/min flow = 4 minutes
AFFF 6% typical 15 gallon storage tank @ 125 gal/min flow = 2 minutes
Novacool UEF 0.4% typical storage tank @ 125 gal/min flow = 30 minutes

Typical cost of foam to treat 1000 gallons of water

ABC Brand AFFF AR 3% x 3% @ \$22.60/gal. = \$678.00, finished foam cost \$0.68/gal.

XYZ Brand Fluoroprotein 3% @ \$17.20/gal. = \$516.00, finished foam cost \$0.52/gal.

DEF Brand AFFF 3% @ \$10.80/gal. = \$324.00, finished foam cost \$0.324/gal.

Novacool UEF 0.4% @ \$38.00/gal. = \$152.00, finished foam cost \$0.152/gal.

All of our products are fully compatible with all fire fighting apparatus, including the most modern equipment.

Fire extinguishing agents and concentrates manufactured by Baum's Castorine, Inc. are guaranteed to be stable, usable and will perform as designed for a period of 10 (ten) years from date of shipping.

This warranty is extended to products stored in factory containers, stainless steel storage tanks. In addition, other acceptable fire apparatus chemical storage compartments may be used. All storage conditions must be away from direct sunlight, repeated freezing and thawing, and oxygen enriched environments.

During our testing and demonstrations we are using products made in 1999 and 1998 without any signs of deterioration in performance.



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 waste water treatment systems. Fluorosurfactants are persistent in the environment, and testing has shown them to be bioaccumulative.

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:

Baum's Novacool UEF 0.4% provides an innovative, highly effective, and environmentally responsible alternative for firefighters. It is effective at approximately one-seventh the concentration of conventional firefighting chemicals. 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 them to be bioaccumulative. 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.

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. Reduces the surface tension of water to improve the penetrating ability of water.
2. Vastly improves the heat transfer from the fuel into water.
3. Reduces fuel vapor pressure by emulsifying class B materials at the fuel surface.

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.

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.
 - Does not contain 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%.