



FIRE DEPARTMENT SERVICE ANNOUNCEMENT

News Release, F3 Classification List, Replacements for AFFF containing PFAS
March 15, 2021

Firefighters have been exposed to PFAS chemicals in firefighting foams. Firefighters continue to not be informed. The US government has acknowledged firefighters are expected to have occupational exposure to PFAS.¹ Firefighters have been put into the position of contaminating their own communities without knowing they were doing so.

The US military is now dealing with massive water contamination issues due to using firefighting foams known as Aqueous Film Forming Foams (AFFF). The US Department of Defense (DoD) is looking for a 'drop-in' replacement product for AFFF.² This does not appear likely. Two separate Military Specification (MilSpec) standards for AFFF and F3 formulations may be considered.³

Instead of depending upon industry provided information, the Foam Exposure Committee (FEC) has worked to confirm fluorine-free firefighting foam products. FEC developed a standard for firefighting foam sample collection. Sample testing was done by Dr. Graham Peaslee who has pioneered the development of the PIGE method to screen for PFAS in environmental samples.

The foam sample collection efforts by FEC members provided a diverse grouping of samples directly from fire departments including airport fire departments which are required to use AFFF by the Federal Aviation Association (FAA). Test samples were obtained from 30 testers in 16 states.

The committee's efforts are intended to provide fire departments the information they need to choose fluorine-free firefighting foam products now. The F3 Classification List, is the result of this work. These firefighting foams can be considered replacements for AFFF foams containing PFAS. This testing project was privately funded with no government monies involved.

1 ATSDR, Toxicological Profile for Perfluoroalkyls, Draft for Public Comment, June 2018, <https://www.atsdr.cdc.gov/ToxProfiles/tp200.pdf>, p. 551

2 5 Things to Know About DOD's Research on 'Fluorine-Free' Firefighting Foam, Miranda Paley, Sept. 6, 2019, <https://www.defense.gov/Explore/News/Article/Article/1953510/5-things-to-know-about-dods-research-on-fluorine-free-firefighting-foam/>

3 Fuel for Firefighting Foam Evaluations: Gasoline vs Heptane, Naval Research Laboratory, NRL/MR/6123-19-9895, Snow, et al. June 15, 2019, <https://apps.dtic.mil/dtic/tr/fulltext/u2/1076690.pdf>

Related / tags: #pfas #firefighters #faa #dod

Foam Exposure Committee
Contact: Vicki Quint, Quint LLC
codepfas@gmail.com
C. 262-794-7226

F3 Foam Concentration List

Replacements for AFFF

Product	Foam Category	Fire Test	Company
F3 Concentrates 3RD PARTY FIRE TESTED			
Bio for N	F3 Class A/B	NFPA 18	Bioex
Cold Fire	F3 Class A/B	NFPA 18	Fire Freeze
Ecopol 3	F3 Class A/B	EN 1, 2, 3, 4	Bioex
Ecopol Premium	F3 AR	3, 4	Bioex
Ecopol A Airport	F3	ICAO B EN 2, 3,	Bioex
Enviro Emax	F3 AR	4	Dafo Fomtec
Fire Cap Plus	F3 Class A/B	NFPA 18	Fire Cap
Knockdown	F3 Class A/B	NFPA 18	National Foam
Micro-Blaze Out	F3 Class A/B	NFPA 18	Verde Environmental
Novacool	F3 Class A/B	NFPA 18	Novacool Foam
Phos-Chek WD881	F3 Class A/B	NFPA 18	Perimeter
Universal Green 3X3	F3 AR	UL-162	National Foam

fdsa@firedepartmentsa.com

© Foam Exposure Committee, 15 March 2021

Kevin Ferrara
 Bill Hutchins
 Dion LeMieux
 Rick Nickeson
 Vicki Quint
 Rick Rockford

Test samples for this project were completed on PIGE which is a spectroscopic technique of fluorine testing. [PIGE - Particle-Induced Gamma-ray Emission]