



Bulletin #86, January 31, 2024
Independent Fire Testing

Before you buy a replacement foam:

1. Read the SDS thoroughly especially Section 15. Be aware of Prop 65 and States' Right-to-know chemicals. You should not be buying a foam containing PFAS.
2. C6 foams should be completely off limits according to Foam Exposure Committee opinion. These foams contain 2 to 3 times the amount of PFAS as the "legacy" foams.
3. Independent third-party fire testing

There is no need for 29,000+ fire departments to run their own fire testing for new foams. There are already independent third-party fire tested foams available. You should review the fire test packet from the manufacturer. UL will not supply these. These contain the performance details. How will your fire department determine truly PFAS-free firefighting foams?

Military Specification (MilSpec): there are now two MilSpecs. Land based is F3 and saltwater foams are C6, containing PFAS.

NFPA 18, Standard on Wetting Agents (2021) "This standard provides requirements for the performance and use of wetting agents as related to fire control and extinguishment. It is intended for the guidance of the fire services, authorities having jurisdiction (AHJ's), and others concerned with judging the acceptability and use of any wetting agent offered for such a purpose."

NFPA 18A, Standard on Water Additives for Fire Control and Vapor Mitigation (2022) "This standard provides the minimum requirements for water additives used for the control and/or suppression of Class A and Class B fires and mitigation of flammable vapors. It's intended for use by those responsible for purchasing, testing, listing, and using such additives."

To the Foam Exposure Committee's knowledge, no foams have passed NFPA 18A.

UL 162, "Testing and certification for firefighting foam analyzes the foam's properties, performance and compatibility with foam equipment in accordance with standards for foam equipment and foam liquid concentrates."

EN 1568 Parts 1-4, European Standard (2018), "Critically tests a foam for both extinguishment and burnback in sea and potable (fresh) water."

Logically, if you have a choice between F3 foams that have the same independent fire testing level – you should choose one without carcinogens.

Warning: you may find difficulty relighting fires for training evolutions!

Foam Exposure Committee | Vicki Quint

Military Specification for Fire Extinguishing Agent, 6 Jan 2023, <https://media.defense.gov/2023/Jan/12/2003144157/-1/-1/1/MILITARY-SPECIFICATION-FOR-FIRE-EXTINGUISHING-AGENT-FLUORINE-FREE-FOAM-F3-LIQUID-CONCENTRATE-FOR-LAND-BASED-FRESH-WATER-APPLICATIONS.PDF>

NFPA 18 Standard, <https://www.nfpa.org/codes-and-standards/1/8/nfpa-18>

NFPA 18A Standard, <https://www.nfpa.org/codes-and-standards/1/8/a/18a?l=339>

UL Standards & Engagements, Foam Equipment and Liquid Concentrates, <https://www.shopulstandards.com/ProductDetail.aspx?UniqueKey=34019> and <https://www.ul.com/services/firefighting-foam-protection-class-b-combustible-liquids>

European Standards, <https://www.firefightingfoam.com/knowledge-base/international-standards/en-1568/>



FDSA
FIRE DEPT SERVICE ANNOUNCEMENT

If you remove fluorine (PFAS) from a firefighting foam, that makes it a wetting agent!