

Date: September 5, 2025

Subject: Foam Fire Extinguisher Solutions and Water Quality

Foam Solution Replacement Intervals

The 2022 edition of NFPA-10 (§ 7.8.2.3.1) requires that premixed foam agents in pressurized extinguishers be replaced per the manufacturer's instructions, with intervals not to exceed the five-year hydrostatic test cycle. This was a change from earlier NFPA guidance, which mandated three-year replacement for AFFF and FFFP premix solutions in pressurized units.

New Options in Firefighting Foam

Industry practices are shifting on firefighting foam use due to growing environmental and regulatory restrictions on PFAS (PFOS and PFOA) chemicals found in legacy AFFF and FFFP formulations. While "non-fluorine" foam formulas have existed for over 75 years, the enhanced surface spreading characteristics associated with the fluorine additives in AFFF/FFFP formulations made them preferred choices. However, recent advances in Synthetic Fluorine-Free Foam (SFFF) formulations along with hardware enhancements are now able to provide the firefighting performance necessary to meet established fire extinguisher code compliance requirements.

RELY NU-FOAM® SFFF is the first fluorine-free foam solution formulation designed for hand portable stored pressure fire extinguishers. Two years of field time studies and accelerated laboratory tests performed support recommending a five-year shelf life expectation. The most critical factor affecting solution stability is the quality of recharge water used. Rely strongly recommends using only clean, fresh, potable water during recharge to minimize microbial growth.

To further ensure and extend the shelf life of NUFOAM® premixed solution to meet the full five-year service cycle, Rely additionally recommends the use of a 397 mg Aqua-Tab™ water purification tablet during recharge. The use of a purification tablet ensures bacterial control and extend shelf life. The utilization of bacteria-free fresh water during recharge helps extend the shelf life of premixed foam agent solutions within the properly recharged and stored Rely P2.5SFFF extinguisher model.

Per RELY FX Service Manual 4096-024, during recharge one 397 mg Aqua-Tab™ tablet may be placed into the extinguisher with the designated 2.4 gallons of clean, fresh, potable water charge prior to adding the RELY NU-FOAM® SFFF concentrate charge 4096-106 to help minimize any bacteria-related concerns. Only the fresh water purification tablets identified in this bulletin have been tested and are permitted to be used in Rely FX extinguishers.

For any additional questions or information where to purchase Aqua-tabs™, contact RELY FX™ technical support at (833) 305-9499 or fxsupport@relyinc.com.