FOAM TESTING/FOAM TEST KIT

Data/Specifications

FEATURES

- Capable of testing any brand of foam products
- Three levels of foam testing available – Standard Quality, Proportioning, or Coast Guard Requirements
- Standard Quality and Coast Guard testing include a lab-scale fire test
- Test kit includes 2 leak-resistant, wide-mouth bottles

APPLICATION

Foam concentrates are exposed to a variety of conditions that could compromise the quality and firefighting ability of the foam. These conditions include contamination, dilution, evaporation, and temperature extremes.

Annual testing of foam concentrates is the only way to ensure foam quality. NFPA 11, Standard for Low-, Medium-, and High-Expansion Foam, and NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, require that samples of foam concentrate be sent for analyses to a qualified lab at least annually for quality condition testing.

A fire test, the only true measure of foam concentrate performance, is the cornerstone of the ANSUL® Foam Testing Service. It has been designed to ensure that the quality and performance of foam concentrates in the field remain within acceptable specifications. The fire test, combined with physical properties and foam quality analyses, fulfills the annual testing requirement for foam concentrates under NFPA 11 and 25. Foam concentrates are evaluated using the same equipment and rigorous test methods applied to production material. The ANSUL Agents Laboratory is capable of analyzing any manufacturer's foam product.

DESCRIPTION

Three levels of foam testing are available – standard quality, proportioning, and Coast Guard requirements.

Standard Quality

- Includes analysis of physical properties as required: pH, refractive index, density, and/or viscosity, as well as sedimentation for protein foams.
- Includes foam quality testing for expansion and 50% drain time.
- Includes lab-scale fire test including extinguishment and burn-back time.
- Pass/fail report issued upon completion of analyses.

Proportioning

- Used to verify system-proportioning capability.
- Refractive index comparison curve issued upon completion of analyses.

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Coast Guard Requirements

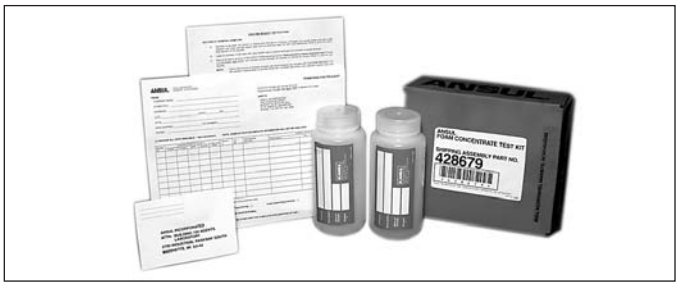
- Includes all analyses listed under Standard Quality with the addition of a sedimentation test.
- Used for port entry/exit of ships.
- Pass/fail report issued upon completion of analyses.

All instrumentation used for testing is calibrated and maintained using strict ISO regulations. For convenience, a foam test sample kit, Part No. 428679, is available. This kit is shipped in a convenient, reusable box and includes 2 leak-resistant, wide-mouth bottles, a return shipping label, a permanent marker, and the required foam analysis request form. Simply take the kit to the job site – no more searching for bottles, boxes, forms, markers, or the shipping address!

TESTING GUIDELINES

Physical properties and foam quality analyses give an indication of performance. Contamination or degradation of foam may be seen in changes of physical properties over time. Expansion and drain time are indicators of foam quality and are analyzed as a premix prepared to the specified percent dilution. The fire test is performed on a lab-scale fire. Parameters of this fire have been carefully correlated to the 50 ft^2 (4.6 m^2) fire that is used for approval under UL Standard 162.

In addition to testing the foam concentrate for quality and performance, the ANSUL Agents Laboratory can test the proportioning of a system; that is, the concentration of the solution after mixing prior to foam generation. A refractometer is used to generate data required to plot a curve of known concentration. This concentration must be prepared using the foam concentrate and the water used in the system. A proportioned field sample's refractive index is then compared to this curve to determine acceptance of the proportioning system.



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