

# Foam Testing Guide

**How to Get Your Foam Tested,  
Guide and Application Form**



Firefighting foam concentrates are the preferred extinguishing medium for many flammable liquid risks. It is vital the foam performs when called upon during any stage of its operational life, therefore it is vital that the foam is tested regularly.

Although foam concentrates have excellent storage characteristics, they can be subjected to harsh climatic conditions outside their intended design criteria or be accidentally spoiled due to contamination by foreign substances or by dilution with water.

Because all foam concentrates are organic materials, they will inevitably suffer a decline in properties and performance with the passage of time.

The need for regular inspection and testing of foam stocks is recognised in international standards.

Foam samples should be sent to the manufacturer or other qualified laboratory for a full assessment to be done. Angus Fire recommend an annual test. Where the concentrate is known to be nearing the end of its operational life or is subject to extreme conditions, then consideration should be given to increasing the frequency of testing.

Samples should be clearly labelled with origin, foam type, and recommended induction rate.

All samples should be packed securely with a completed Foam Testing Service Application Form and sent to the return address overleaf.

## Foam Concentrate

A one litre sample of foam concentrate in a clean polythene container is required. If new unused containers are unavailable, ensure the containers are washed properly beforehand.

Do not use containers which have previously contained detergent or oil materials. Samples of foam concentrates should be representative of the parent stock.

A foam drum should be rolled or agitated to produce a homogeneous mix before drawing a sample from the top. For bulk foam storage tanks circulate the contents to produce a homogeneous mix before taking a sample. Alternatively draw samples from the top, middle and base. Use a hollow tube to take a sample from the middle.

For the base sample use a side-exiting outlet pipe or alternatively run off about 25 litres of foam first to remove any accumulated sediment. This run-off may be returned to the top of the tank. Several samples off the sample batch number may be mixed equally to produce a single composite sample.

## Foam Premix Solutions

Activate the fixed foam system and allow sufficient time for it to achieve equilibrium. For overhead devices, the sample collector should be placed in the discharge area where it is anticipated a representative foam pattern will occur. For foam chambers, where access can be gained to a flowing foam stream, the container can be inserted into the edge of the stream to split off a portion for the sample. The other alternative is to scoop foam from a blanket already on the surface. Here an attempt should be made to obtain a full cross-section of foam from the entire depth. Sufficient aerated foam should be collected to provide a 100ml sample of foam solution after draining. Clearly labelled one litre samples of the foam concentrate and a 2 litre sample of the water used in the foam system must also be submitted. Failure to comply with this request will result in a no test.

### Do

- Submit 1 litre samples of foam concentrate.
- Use new polythene containers where possible.
- Wash out previously used containers and ensure they are clean and dry.
- Take a "representative" sample after mixing the parent stock.
- Submit Angus C6 or any F3 foams for testing.
- Label the sample.

### Do not

- Send samples of C8 foam
- Use containers that have previously contained detergent or oil
- Use containers that may split or leak during transit.
- Take samples from a tank or drum without first mixing the foam.
- Submit premix solutions without a sample of the foam concentrate and system water.
- Submit foams without a label.

# Foam Testing Guide - Application Form

Company: _____	Order Number: _____
Customer Name: _____	
Address: _____ _____ _____	
Country: _____	Email: _____
	Telephone: _____
	Fax: _____

**\*Sample Information** *Only fluorine free or Angus C6 foams are eligible for testing. C8 testing has been discontinued*

Product Name: _____	<input checked="" type="checkbox"/> 1 litre sample	<input checked="" type="checkbox"/> Clean/Dry Bottle	<input checked="" type="checkbox"/> 1 form per sample
Foam Type	<input type="checkbox"/> Protein	<input type="checkbox"/> Synthetic	<input type="checkbox"/> Fluorine Free
	<input type="checkbox"/> Proportioning Testing	<input type="checkbox"/> Hi-Expansion	
Concentration	<input type="checkbox"/> 1%	<input type="checkbox"/> 3%	<input type="checkbox"/> 6%
	<input type="checkbox"/> 1-3%	<input type="checkbox"/> 3-3%	<input type="checkbox"/> 3-6%
Storage Type	<input type="checkbox"/> Original containers	<input type="checkbox"/> Bulk tank	
	<input type="checkbox"/> Other (specify) _____		
Sample Age (years)	<input type="checkbox"/> Under 2	<input type="checkbox"/> 2 - 5	<input type="checkbox"/> >5
Storage Temperature (°C) _____	Comments _____		

*\*Angus Fire reserve the right to reject any foam sample returned that is not in compliance with the foam testing guidelines highlighted in this document.*

**EMERGENCY FOAM SERVICE** Call +44 (0) 15242 61166 – 24 hours a day, every day

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Return address

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