

1.0 This manual is a guide for the use of the following products when used as part of an FM Approved or UL Listed foam system:

Fomtec AFFF 1% Ultra LT, Fomtec AFFF 3%S, Fomtec ARC 3x3S.

2.0 Storage and Handling:

2.1 Storage of the concentrate shall be in a suitable tempered area out of direct sunlight.

2.2 The concentrate shall be stored in the original packaging or in a bladder tank that is UL Listed, shown in the FM Approval Guide or in a suitable atmospheric storage tank made of:

- a. Concentrate compatible glass fiber reinforced plastic
- b. High density polyethylene tanks
- c. Stainless steel SS316L, SS316, SS304 or equivalent

The tanks shall be marked with foam concentrate product name, date of filling, total volume and the foam concentrate batch number to ensure future traceability.

2.3 Transfer of the concentrate from one storage vessel to another shall be done with a clean suitable pump and non-collapsible hoses. The transfer shall be done in such a way that minimal foaming takes place and that no air is drawn into the product during the pumping process. Use a positive displacement pump (gear, lobe, or membrane) for pumping of pseudo plastic foam concentrate.

2.4 Study the product MSDS before handling. Always use safety glasses and suitable gloves when handling the concentrate. Spilled concentrate shall be handled according to local regulations.

3.0 Compatible Materials:

3.1 Storage Tanks:

- a. Bladder tanks as described in the FM Approvals Guide or UL Listing
- b. High density polyethylene tanks
- c. Tanks made of stainless steel SS316L, SS316, SS304 or equivalent

3.2 Concentrate Pipes:

- a. Stainless steel SS316L, SS316, SS304
- c. Appropriate brass pipes approved for use in fire systems

4.0 Foam System Design

4.1 The foam concentrate shall only be used with proportioning and discharge devices as shown in the FM Approval Guide or UL Listing. The system design, installation, operation, and maintenance shall be done according to the appropriate data sheets from Viking or KCA, NFPA 11, FM Global Property Loss Prevention Data Sheets and other relevant local standards.

5.0 Inspection/Testing/ Maintenance

5.1 The foam concentrate should be tested annually. The testing should be made by a suitable laboratory for analysis of foam concentrates and should measure: pH, specific gravity, expansion, drainage time as per NFPA 11 annex D or Fomtec test procedure 1304, film formation test as per FM 5130 point 4.5 or Fomtec test procedure 1306, alcohol resistance (for ARC 3x3S only) according to Fomtec test procedure 1314, and viscosity as per FM 5130 Appendix J or Fomtec test procedure 1305. Storage containers should be inspected and re-evaluated for the suitability of the storage location in regards to temperature fluctuations (temperature should be as stable as possible). Exposure to direct sunlight should be avoided.

6.0 Never mix with concentrate of another brand.