



TECHNICAL DATA

VIKING FOAM VF3NWAFFF-MS

1. PRODUCT NAME

3% Premium AFFF Foam
Concentrate
Viking Part Number:
VF3NWAFFF-MS

2a. MANUFACTURED BY NATIONAL FOAM

150 Gordon Drive
P O Box 695
Exton PA 19341

2b. MANUFACTURED FOR THE VIKING CORPORATION

210 N Industrial Park Road
Hastings, MI U.S.A. 49058
Telephone: (616) 945-9501
(877) 384-5464
Fax: (616) 945-9599
e-mail: techsvcs@vikingcorp.com

3. DESCRIPTION

Viking VF3NWAFFF-MS 3% AFFF is a synthetic firefighting foam concentrate designed for use on non-polar, hydrocarbon hazards. When proportioned with water and applied with conventional foam or water/fog equipment, Viking VF3NWAFFF-MS 3% AFFF provides excellent control and extinguishment of Class B fires by spreading a vapor-sealing film over the liquid fuel. This vapor seal inhibits reflash even when the foam blanket is ruptured, and it also allows the product to be used to secure non-ignited spills. Viking VF3NWAFFF-MS 3% AFFF provides excellent penetrating and wetting qualities when used on Class A fires. This is important when extinguishing deep-seated fires in wood, paper, rubber tires, and other ordinary combustibles.

4. APPROVALS

- U.L. Listed
- Factory Mutual Approved
- US Military Specification MIL-F-24385F

5. TYPICAL PROPERTIES

(Not for specification purposes.)
Nominal use concentration: 3%
Specific gravity @
77°F (25°C): 1.04
Viscosity @
77°F (25°C): 3.0 centistokes

Minimum use temperature:
35°F (2°C)

Maximum use temperature:
120 °F (49°C)

Freeze point: 17°F (-8°C)

pH @ 77 °F (25 °C): 8.0

Appearance: Light Amber Color

6. APPLICATIONS

Viking VF3NWAFFF-MS 3% AFFF can be used with conventional foam equipment with fresh, sea, or brackish water. Self-educing foam nozzles and foam nozzles with in-line eductors are among the most common types of hardware for application.

In addition to its use in aspirating foam equipment, Viking VF3NWAFFF-MS 3% AFFF can be dispensed effectively through non-aspirating equipment, including fog nozzles, water spray devices, and standard sprinklers. Viking VF3NWAFFF-MS 3% AFFF exceeds U.S. Military Specification MIL F24385F, supersedes E (SH), and is listed on the U.S. Military Q.P.L. (Qualified Product List). Viking VF3NWAFFF-MS 3% AFFF is listed by UL and approved by Factory Mutual Research Corporation (FM).

Viking VF3NWAFFF-MS 3% AFFF may be applied to fires simultaneously with dry chemical firefighting agents because the two are compatible.

7. FEATURES

- Low energy input AFFF - requires minimal agitation.
- Excellent fluidity provides rapid "knockdown".
- Suitable for use with fresh or sea water.
- Compatible with standard proportioning and foam making devices.
- Suitable for use with foam compatible dry powder extinguishing agents.

8. STORAGE AND HANDLING

Viking VF3NWAFFF-MS 3% is ideally stored in its original shipping container or in tanks or other con-

tainers which have been designed for such foam storage. Recommended construction materials are stainless steel (Type 304L or 316), high density cross-linked polyethylene, or reinforced fiberglass polyester (isophthalic polyester resin) with a vinyl ester resin internal layer coating (50-100 mils).

Foam concentrates are subject to evaporation which accelerates when the product is exposed to air. Storage tanks should be sealed and fitted with a pressure vacuum vent to present free exchange of air. The recommended storage environment is within the UL-listed temperature range of 35°F to 120°F (-2°C to 49°C).

VF3NWAFFF-MS 3% has been tested for compatibility with all 3% AFFF foam concentrates which are qualified to MIL-F-24385F, and are suitable for mixing in long term storage. It should not be mixed with other foam concentrates which are qualified to MIL-F-24385F. Such mixing could lead to chemical changes in the product and a possible reduction in or loss of fire fighting capability. Most expanded foams are compatible for side-by-side application during an incident.

VF3NWAFFFMS 3% may be stored as a 3% premixed solution using fresh water. A biocide agent should be added to prolong storage life of the premix solution.

Viking VF3NWAFFF-MS 3% is suitable for use in combination with foam compatible dry chemical extinguishing agents.

9. SHELF LIFE

The shelf life of any foam concentrate is maximized by proper storage conditions and maintenance. Factors affecting shelf life are wide temperature changes, extreme high or low temperatures, evaporation, dilution, and contamination by foreign materials. Properly stored Viking AFFF foam concentrates have been tested and shown no significant loss



TECHNICAL DATA

VIKING FOAM VF3NWAFFF-MS

of firefighting performance, even after 15 years. Annual testing of all firefighting foam is recommended by the National Fire Protection Association (NFPA).

10. ENVIRONMENTAL AND TOXICOLOGICAL INFORMATION

Viking VF3NWAFFF-MS 3% is biodegradable. However, as with any substance, care should be taken to prevent discharge from entering ground water, surface water, or storm drains. With advance notice, Viking VF3NWAFFF-MS 3% can be treated by local biological sewage treatment systems. Since facilities vary widely

by location, disposal or discharge of Viking VF3NWAFFF-MS 3% concentrate or foam solution should be made in accordance with federal, state and local regulations.

The Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) of Viking VF3NWAFFF-MS 3% are as follows:

BOD5	Concentrate 480,000 mg/kg
COD	Concentrate 516,000 mg/kg

Viking VF3NWAFFF-MS 3% has not been tested for acute oral toxicity, primary skin irritation, or primary eye irritation. Repeated skin contact will remove oils from the skin and cause dryness. Viking VF3NWAFFF-MS 3% is a primary eye irritant, and contact with the eyes should be avoided. Users are advised to wear protective equipment. If Viking VF3NWAFFF-MS 3% enters the eyes, flush them well with water and seek immediate medical attention. For further details, see the Viking VF3NWAFFF-MS 3% Material Safety Data Sheet.

OBSOLETE