

# AER-O-FOAM XL-3E Ethylene Glycol Free Fluoroprotein Foam Concentrate

## Description

**DATA SHEET** 

**#NFC140** 

Aer-O-Foam<sup>®</sup> XL-3E is a superior quality fluoroprotein foam concentrate which is used at 3% to extinguish hydrocarbon fuel flammable liquid fires. It is specifically formulated without ethylene glycol and is therefore suitable for use where this chemical is prohibited.

#### Features

- Stable long-lasting foam blanket provides excellent burnback resistance.
- Highly resistant to fuel contamination.
- Suitable for use with fresh or sea water.
- Compatible with standard proportioning and air aspirating foam making devices.
- Suitable for use with foam compatible dry powder extinguishing agents.
- Contains no ethylene glycol.

Aer-O-Foam XL-3E is manufactured utilizing a unique process which produces unmatched quality protein hydrolyzate to form the foundation for the concentrate formulation. The protein base provides a long lasting stable foam blanket, highly resistive to the effects of heat. This prevents reignition and enhances burnback resistance. Fluorochemical surfactant additives are combined with the protein base to increase fluidity of the foam enabling it to seal around obstructions.

### **Typical Physical Properties**

Appearance	. Dark Brown Color
Specific Gravity at 68°F(20°C)	1.16
pH	7.3
Freezing Point	< 5°F(-15°C)
Minimum Usable Temperature	20°F(-7°C)
Maximum Usable Temperature	
Effects of Freeze/Thaw No	performance loss

## Applications

Aer-O-Foam XL-3E is used in fire suppression systems and manual applications to fight fires involving hydrocarbon fuels such as crude oil, gasoline, and fuel oils. It is not suitable for use on most polar solvents or water miscible fuels such as alcohols, ketones, esters, and ethers. Typical storage tank systems include surface (topside) application or subsurface injection. Other uses include, loading racks, docks, process areas, spills, etc. For best performance, fluoroprotein foam concentrates should be used with aspirating nozzles and foam making devices.

#### Approvals and Listings

- Underwriters Laboratories, Inc.
- Underwriters' Laboratories of Canada (ULC)

#### Application Rates on Hydrocarbons

Discharge Device	Application Rate
or Application Type	gpm/ft <sup>2</sup> (I/m/m <sup>2</sup> )
Type II (Foam Chambers)	0.10 (4.1)

Type III (Portable Nozzles or monitors) ......0.16 (6.5)

### Storage and Handling

Aer-O-Foam XL-3E is ideally stored in its original shipping container or in tanks or other containers which have been designed for such foam storage. Recommended construction materials are carbon steel, 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 prevent free exchange of air. The recommended storage environment is within the UL Listed temperature range of 20°F to 120°F (-7°C to 49°C).

Aer-O-Foam XL-3E should not be mixed with any other type of foam concentrate in long term storage. Such mixing could lead to chemical changes in the product and a possible reduction in or loss of firefighting capability. Most expanded foams are compatible for side-by-side application during an incident.

### Shelf Life, Inspection and Testing

The shelf life of any foam concentrate is maximized by proper storage conditions and maintenance. Factors af-



fecting shelf life are wide temperature changes, extreme high or low temperatures, evaporation, dilution, and contamination by foreign materials.

Annual testing of all firefighting foam is recommended by the National Fire Protection Association (NFPA). National Foam provides a Technical Service Program to conduct such tests.

# Environmental and Toxicological Information

Aer-O-Foam XL-3E 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, Aer-O-Foam XL-3E solution can be treated by local biological sewage treatment systems. Since facilities vary widely by location, discharge or disposal of Aer-O-Foam XL-3E 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 Aer-O-Foam XL-3E are as follows:

BOD <sub>5</sub>	101,000	mg/kg
COD	571,000	mg/kg

Repeated skin contact will remove oils from the skin and cause dryness. Aer-O-Foam XL-3E is a primary eye irritant, and contact with the eyes should be avoided. Users are advised to wear protective equipment. If Aer-O-Foam XL-3E enters the eyes, flush them well with water and seek immediate medical attention. For further details, see the Aer-O-Foam XL-3E Material Safety Data Sheet.

Ordering In CONTAINER	formation SHIPPING WEIGHT	PARTNUMBER	
<b>5-Gallon Pails</b> (19 litres)	<b>s</b> 51 lbs. (23.2 kg)	2111-1340-6	
55-Gallon Dru (208 litres)	<b>ms</b> 554 lbs. (251.8 kg)	2111-1481-6	
<b>275-Gallon IBC Reusable Tote Tank</b> (1041 litres) 2804 lbs. (1274.6 kg) 2111-1725-6			
Bulk	9.64 lbs./gal.(1.16 kg/l)	2111-1001-6	
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Palletizing of pails and drums is available upon request.

#### SHIPPING CUBE

5-Gallon Pail	1.13	cu. f	t. (0.032 cu. m)
55-Gallon Drum	11.51	cu. f	ft. (0.326 cu. m)
275-Gallon IBC Tote Tank	51.11	cu. f	t. (1.1061cu. m)

This information is only a general guideline. The company reserves the right to change any portion of this information without notice. Terms and conditions of sale apply and are available on request.

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