

# DATA SHEET #NFC137 Fluoroprotein Foam Concentrate

#### Description

Aer-O-Foam® XLX-6 is a fluoroprotein foam concentrate, useful for extinguishing fires involving hydrocarbon fuels.

Aer-O-Foam XLX-6 is listed by Underwriters Laboratories for use on hydrocarbons at 6% proportioning, using either fresh or seawater. The UL listings for Aer-O-Foam XLX-6 foam concentrate include its application through a variety of proportioners and foam making devices. Consult the National Foam Engineering Manual for a complete list of these devices.

#### 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.

## **Technical Information**

Aer-O-Foam XLX-6 is a protein based foam formulated with fluorochemical surfactants. 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 and enhance the resealability when the foam blanket is disrupted. The properties of the fluorochemical surfactant, in conjunction with those of the hydrolyzed protein insure a stable, long lasting foam blanket to give protection against vaporization and reignition of common hydrocarbon fuels.

Aer-O-Foam XLX-6 is suitable for both topside and subsurface application to hydrocarbon flammable liquid storage tank fires. Aer-O-Foam XLX-6 can be used in foamwater sprinkler systems and through a large number of air-aspirating foam making devices.

Aer-O-Foam XLX-6 is compatible with dry chemical extinguishing agents such as Potassium Bicarbonate.

Aer-O-Foam XLX-6 is designed for use on hydrocarbon fuels such as crude oil, gasoline and fuel oils. It is not

suitable for use on polar solvents or water miscible fuels such as ethyl and methyl alcohols, ketones, aldehydes, and ethers.

#### Applications

Aer-O-Foam XLX-6 is suitable for use in combating fires in storage tanks, loading racks, docks, ships, process areas and warehouses. It can be used in aircraft hangar systems and for airport emergency/crash fire rescue applications. For best performance, fluoroprotein foam concentrates should be used with aspirating nozzles and foam making devices.

# Typical Physical Properties

Appearance	Dark Brown Color
Specific Gravity at 68°F(20°C)	1.11
pH	7.4
Viscosity at 68°F(20°C)	9.0 csk
Freezing Point	19°F(-7°C)
Minimum Usable Temperature	35°F(2°C)
Maximum Usable Temperature	120°F(49°C)

## Approvals and Listings

• Underwriters Laboratories, Inc.

Aer-O-Foam XLX-6 has successfully passed UL-162 7th Edition test criteria for use at 6% concentration on hydrocarbons fuels. Consult the National Foam Engineering Manual for a complete list of these devices.

## Storage and Handling

Aer-O-Foam XLX-6 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 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 35°F to 120°F (2°C to 49°C).

It is recommended that Aer-O-Foam XLX-6 not be mixed with any other type of foam concentrate in long term stor-



age. 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 sideby-side application during an incident.

Aer-O-Foam XLX-6 is suitable for use in combination with foam compatible dry chemical extinguishing agents.

#### Shelf Life, Inspection, and Testing

Proper storage conditions and maintenance maximize the shelf life of any foam concentrate. Factors affecting shelf life are wide temperature changes, extreme high or low temperatures, evaporation, dilution, and contamination by foreign materials.

The National Fire Protection Association (NFPA) recommends annual testing of all firefighting foam. National Foam provides a Technical Service Program to conduct such tests.

# Environmental and Toxicological Information

Aer-O-Foam XLX-6 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 XLX-6 can be treated by local biological sewage treatment systems. Since facilities vary widely by location, disposal 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 XLX-6 are as follows:

BOD <sub>5</sub>	118,000 mg/kg
COD	491,000 mg/kg

Repeated skin contact will remove oils from the skin and cause dryness. Users are advised to wear protective equipment. If Aer-O-Foam XLX-6 enters the eyes, flush them well with water and seek immediate medical attention. For further details, see the Aer-O-Foam XLX-6 Material Safety Data Sheet.

#### **Ordering Information**

CONTAINER	SHIPPING WEIGHT	PART NUMBER	
<b>5-Gallon Pails</b> (19 liters)	49 lbs. (22.2 kg)	1111-5340-6	
<b>55-Gallon Drun</b> (208 liters)	<b>ns</b> 532 lbs. (241.3 kg)	1111-5481-6	
	<b>Reusable Tote Tank</b> 2692 lbs. (1220.9 kg)	1111-5725-6	
Bulk	9.27 lbs./gal.(1.11 kg/l)	1111-5001-6	
Palletizing of pails and drums is available upon request			

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#### SHIPPING CUBE

5-Gallon Pail	1.13 cu. ft. (0.032 cu. m)
55-Gallon Drum	11.51 cu. ft. (0.326 cu. m)
275-Gallon IBC Tote Tank	51.11 cu. ft. (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. 10/04 (Rev A) Printed in USA (NFC137-AOFXLX-6.PMD)

NATIONAL FOAM, INC. P.O. Box 695 • Exton, PA 19341-0695 • (610) 363-1400 • Fax: (610) 524-9073 www.Kidde-Fire.com