



## TECHNICAL DATA

**3% - 6% AR-AFFF  
FOAM CONCENTRATE  
C-363**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services 877-384-5464 Fax: 269-945-4495 Email: techsvcs@vikingcorp.com

### 1. DESCRIPTION

Chemguard 3%-6% AR-AFFF C-363 is a specially formulated, aqueous film forming free flowing viscous foam concentrate. It forms a vapor suppressing aqueous film on hydrocarbon type fuels or a polymeric membrane on polar solvent/water miscible type fuels. It is intended for use at a proportioning rate of 3% (3 parts AR-AFFF concentrate to 97 parts water) on hydrocarbon fuels such as gasoline, kerosene, diesel etc. C-363 AR-AFFF is also intended for use at a 6% proportioning rate (6 parts AR-AFFF concentrate to 94 parts water) on polar solvent/ water miscible fuels such as alcohols, ketones, esters, etc.

#### Features

- Excellent wetting characteristics when used in combating Class A fuel fires
- Suitable for use with deluge and closed head foam water sprinkler systems.
- Suitable for use with carbon steel, fiberglass, polyethylene or stainless steel. Chemguard 3%- 6% AR-AFFF is not compatible with galvanized pipe or fittings in an undiluted form.
- Suitable for use with dry chemical extinguishing agents
- Suitable for use on hydrocarbon or polar solvent type fuels
- Suitable for use with both air-aspirating foam and standard water fog nozzles
- Suitable for use with fresh or salt water



### 2. LISTINGS AND APPROVALS

UL Listed - for sub surface injection applications on hydrocarbons only  
cUL Listed

### 3. TECHNICAL DATA

#### A. Typical Properties

(Not for specification purposes)

Specific gravity @ 77°F (25°C):	1.016
Viscosity @ 77°F (25°C):	2000 - 2500 cps
Minimum storage temperature:	35°F (2°C)
Maximum storage temperature:	120°F (49°C)
pH @ 77°F (25°C):	7.3
Appearance:	Off white Gel-like Liquid

Viking Technical Data may be found on  
The Viking Corporation's Web site at  
<http://www.vikinggroupinc.com>.  
The Web site may include a more recent  
edition of this Technical Data Page.

Aspirating type discharge devices typically generate expansion ratios between 6-10 to 1 when C-363 is mixed with water at the correct ratio. Non-aspirating type devices will typically generate expansion ratios of between 2-4 to 1. Expansion ratios are dictated by the type of discharge device, flow rate and discharge pressure.

3%-6% C-363 cannot be used in sub-surface applications with polar solvent type fuels.

#### B. Ordering Information

5-Gallon Pails (19 liters)

45 lb. (20.4 kg)

Part No. F14973/5

55-Gallon Drums (208 liters)

490 lb. (22.3 kg)

Part No. F14973/55

### 4. STORAGE, ENVIRONMENTAL, PROPORTIONING AND DISCHARGE DEVICES

#### A. Storage And Shelf Life

If kept in the original unopened and airtight Chemguard supplied container and stored within the temperature range of 35°F-120°F (2°C-49°C), a shelf life of between 20-25 years can be expected. If the C-363 is to be stored in an atmospheric type foam concentrate storage tank, whether on mobile apparatus or stationary, limit the air space above the surface of the concentrate whenever possible and place a layer of quality mineral oil on the surface of the foam concentrate to minimize any effect from evaporation.

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 AFFF foam concentrates have been tested and shown no significant loss of fire fighting performance, even after 15 years. Annual testing of all fire fighting foam is recommended by the National Fire Protection Association (NFPA).

#### B. Environmental And Toxicological Information

C-363 is biodegradable, low in toxicity and with advance notice, C-363 can be treated by local sewage treatment systems.



## TECHNICAL DATA

**3% - 6% AR-AFFF  
FOAM CONCENTRATE  
C-363**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services 877-384-5464 Fax: 269-945-4495 Email: techsvcs@vikingcorp.com

However, as with any substance, care should be taken to prevent discharge from entering ground water, surface water, or storm drains. Since facilities vary widely by location, disposal or discharge of C-363 concentrate or foam solution should be made in accordance with federal, state and local regulations.

C-363 is a primary skin irritant. Repeated skin contact will remove oils from the skin and cause dryness. C-363 is a primary eye irritant, and contact with the eyes should be avoided. Users are advised to wear protective equipment. If C-363 enters the eyes, flush them well with water and seek immediate medical attention. For further details, see the C-363 Material Safety Data Sheet.

### C. Proportioning Devices

- Fixed or portable in-line eductors
- In-line balanced pressure and pump pressure proportioning skid
- Bladder tank balanced pressure proportioning systems
- Around the pump proportioners
- Handline, air-aspirating nozzles with fixed eductor pickup tube

### D. Discharge Devices

- Foam Chambers
- Air-aspirating and non air-aspirating sprinkler heads or spray nozzles
- Standard water fog nozzles for handlines and monitors
- Air-aspirating foam nozzles. Refer to Listing for application rate
- Foam makers for use with either Floating Roof storage tanks or Dike/Bund protection systems

## 5. INSPECTIONS, TESTS AND MAINTENANCE

**NOTICE:** The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to recognized standards such as those produced by NFPA, LPC, and VdS which describe care and maintenance of sprinkler systems. In addition, the "Authority Having Jurisdiction" may have additional maintenance, testing and inspection requirements which must be followed.

**WARNING:** Any system maintenance or testing which involves placing a control valve or detection system out of service may eliminate the Fire Protection of that system. Prior to proceeding, notify all Authorities Having Jurisdiction. Consideration should be given to employment of a Fire Patrol in the affected area.

## 6. AVAILABILITY

3%-6% C-363 is available through a network of domestic and international distributors. See the Viking Corp. web site for closest distributor or contact The Viking Corporation.

## 7. GUARANTEE

For details of warranty, refer to Viking's current list price schedule or contact Viking directly.

Fuel		Application Rates
Hydrocarbon Fuels		.10 gpm/ft. <sup>2</sup>
Polar Solvent Fuels	IPA	0.15 gpm/ft. <sup>2</sup>
	Methanol	0.12 gpm/ft. <sup>2</sup>
	Ethanol	0.13 gpm/ft. <sup>2</sup>
	Acetone	0.14 gpm/ft. <sup>2</sup>
	Methyl Ethyl Ketone	0.13 gpm/ft. <sup>2</sup>
	Ethyl Acetate	0.13 gpm/ft. <sup>2</sup>
	MTBE	0.15 gpm/ft. <sup>2</sup>