

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

**FEATURES**

- U.L. listed, Foam Liquid Concentrate
- Used at a 3% proportioning rate on both hydrocarbon and polar solvent fuels
- Suitable for use with either fresh or salt water
- Excellent wetting characteristics when used in combating Class "A" fuel type fires
- Suitable for use with fiberglass, polyethylene or stainless steel. 3% x 3% AR-AFFF is not compatible with galvanized pipe or fittings in an undiluted form.
- Suitable for use on hydrocarbon or polar solvent type fuels
- Suitable for use with both air-aspirating foam and standard water fog nozzles
- Economized for Topsides applications

**PROPORTIONING**

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

**DISCHARGE DEVICES**

- Foam Chambers
- Standard water fog nozzles for handlines and monitors
- Air-aspirating foam nozzles
- Foam makers for use with either Floating roof storage tanks or Dike/Bund protection systems

**FOAMING PROPERTIES**

Aspirating type discharge devices typically generate expansion ratios between 6-10 to 1 when 3% x 3% AR-AFFF 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

**TYPICAL PROPERTIES AT 77°F (25°C)**

Appearance	Amber Gel-Like Liquid
Specific Gravity	1.02 g/ml
pH	7.7 +/- 0.3
Viscosity	1500 cP Minimum*

\*Brookfield #4 Spindle at 30 rpm

**DESIGN INFORMATION**

Cannot be used in sub-surface applications with polar solvent type fuels.

**APPLICATION RATES**

Recommended application rate on hydrocarbon type fuels is 0.10 gpm/ft<sup>2</sup>. On the following specific polar solvent type fuels these are the recommended minimum application rates.

IPA	0.16 gpm/ft <sup>2</sup>
Methanol	0.13 gpm/ft <sup>2</sup>
Ethanol	0.14 gpm/ft <sup>2</sup>
Methyl Ethyl Ketone	0.13 gpm/ft <sup>2</sup>
Ethyl Acetate	0.15 gpm/ft <sup>2</sup>
MTBE	0.15 gpm/ft <sup>2</sup>

**ENVIRONMENTAL IMPACT**

Chemguard 3% x 3% AR-AFFF is biodegradable, low in toxicity and can be treated in sewage treatment plants. Please refer to Chemguard Technical Bulletin regarding foam products and the environment.

**STORAGE**

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

**ORDERING INFORMATION & WEIGHT**

Part No:	Container	Weight
C333P	5-Gallon Pail / 19 Liters	45 lbs.
C333D	55-Gallon Drum / 208 Liters	495 lbs.
C333BD	330-Gallon Tote / 1249 Liters	3000 lbs.