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## Synthetic AR-AFFF Foam 3% AR-AFFF Part No. C-333

### DESCRIPTION

Chemguard 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% 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% AR-AFFF is specifically formulated for top-side, or type II and type III applications.

### FEATURES

- U.L. listed, Foam Liquid Concentrates
- 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% 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

### PROPORTIONING

Chemguard 3% AR-AFFF is designed for use with the following types of proportioning equipment.

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

### DISCHARGE DEVICES

Chemguard 3% AR-AFFF is suitable for use with the following 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% 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

## DESIGN INFORMATION

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

## TYPICAL PROPERTIES AT 77°F (25°C)

Appearance	Off White Gel-Like Liquid
Specific	1.01 g/ml
pH	7.7
Viscosity	3000 cps

## 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	0.12 gpm/ft <sup>2</sup>
ETHANOL	0.14 gpm/ft <sup>2</sup>
METHYL ETHYL KETONE	0.12 gpm/ft <sup>2</sup>
ETHYL ACETATE.	0.12 gpm/ft <sup>2</sup>
MTBE	0.15 gpm/ft <sup>2</sup>

## ENVIRONMENTAL IMPACT

Chemguard 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 air tight 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

Chemguard 3% AR-AFFF is available in 5 gallon plastic pails, 55 gallon plastic drums, 330 gallon plastic bulk drums or can be shipped in bulk.

Part No. C-333P	5 Gal. Pail
Part No. C-333D	55 Gal. Drum
Part No. C-333BD	330 Gal. Bulk Drum

## SHIPPING WEIGHT

5 Gal. Pail	44 lbs.
55 Gal. Drum	485 lbs.
330 Gal. Bulk Drum	2485 lbs.