

DESCRIPTION

ISS Ultraguard 3% AR-AFFF is a specially formulated, aqueous film forming free flowing viscous foam concentrate.

It forms a vapor suppressing aqueous film on hydrocarbontype fuels or a polymeric membrane on polar solvent/water miscible type fuels. Ultraguard **3% AR-AFFF** 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.,

and on polar solvent/water miscible fuels such as alcohols, ketones, esters, etc.

FEATURES

- U. L. Listed.
- 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 deluge or closed head foam water sprinkler systems.
- Suitable for use with fiberglass, polyethylene or stainless steel.

Ultraguard **3% 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.

PROPORTIONING

ISS Ultraguard **3% AR-AFFF** is designed for use with the following types of proportioning equipment:

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

DISCHARGE DEVICES

ISS Ultraguard **3% AR-AFFF** is suitable for use with the following 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.
- Foam makers for use with either Floating Roof storage tanks or Dike /Bund protection systems.
- High back pressure foam makers for subsurface base injection system (hydrocarbon type fuels only).

Recommended application rate on Hydrocarbon type fuels is 0.10 gpm/ft². and on polar solvent type fuels is 0.15 gpm/ft². On the following specific polar solvent type fuels these are the recommended minimum application rates.

IPA	0.15 gpm/ft ² .
METHANOL	0.13 gpm/ft ² .
ETHANOL	0.14 gpm/ft ² .
METHYL ETHYL KETONE	0.13 gpm/ft ² .
ETHYL ACETATE	0.15 gpm/ft ² .
MTBE	0.15 gpm/ft ² .

DESIGN INFORMATION

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

FOAM PROPERTIES

Aspirating type discharge devices will 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.

ENVIRONMENTAL IMPACT

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

TYPICAL PROPERTIES AT 25° C (77° F)

Appearance:	Off-White Gel –Like Liquid
Specific Gravity	: 1.02 ± 0.01 g/ml
pH:	7.4 ± 0.50
Viscosity:	3800 ± 500 cps

STORAGE

If kept in the original unopened and airtight **ISS** supplied container and stored within the temperature range of 35°F - 120°F

 $(1.7^{\circ}C - 49^{\circ}C)$, a shelf life of between 20-25 years can be expected.

When stored in other than the manufacturer's supplied container, please check with **ISS** for storage guide lines.

ORDERING INFORMATION

Part No. **EGY-CUG** is available in 20 Liter Pails, 200 Liter Drums and 1000 Liter Bulk Drums.

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