



VERDE ENVIRONMENTAL, INC.

FOAM CONCENTRATES

Micro-Blaze Out PLUS[®] 3% x 3% AR-AFFF

Description

Micro-Blaze Out PLUS[®] 3% x 3% AR-AFFF is an enhanced state-of-the-art foam concentrate designed for use on both Class B Hydrocarbon and Polar Solvent fuels. It generates an aqueous film on Class B Hydrocarbon type fuels or a polymeric membrane on polar solvent / water miscible type fuels. **Micro-Blaze Out PLUS[®] 3% x 3% AR-AFFF** is intended for use at a proportioning rate of 3% [3 parts AR-AFFF concentrate to 97 parts water] on class B Hydrocarbon fuels such as gasoline, kerosene and diesel as well as polar solvent / water miscible fuels such as isopropyl alcohol, ketone and esters.

Features

- U.L. Listed
- Contains Micro-Blaze[®] microbes for remediation of hydrocarbon and polar solvent wastes
- Suitable for use with either fresh or salt water
- Suitable for use with Deluge and Closed-Head Foam Water Sprinkler systems
- Suitable for use with fiberglass, polyethylene or stainless steel. **Micro-Blaze Out PLUS[®] 3% x 3% AR-AFFF** is not compatible with galvanized pipe or fittings in an undiluted form.
- Suitable for use with dry chemical extinguishing agents
- Excellent wetting characteristics when used in combating Class A combustibles.
- Suitable for use with both air-aspirating foam and standard water fog nozzles

PROPORTIONING

Micro-Blaze Out PLUS[®] 3% x 3% AR-AFFF is designed for use with the following types of proportioning equipment:

- Fixed or portable in-line eductors

- In-Line Balanced Pressure [ILBP] Pump Pressure proportioning skid
- Bladder tank Balanced Pressure proportioning systems
- Around-the-Pump proportioners
- Handline, air-aspirating nozzles with fixed educator pickup tube

DISCHARGE DEVICES

Micro-Blaze Out PLUS[®] 3% x 3% AR-AFFF is designed for use with the following discharge devices:

- Foam Chambers
- Air-aspirating and non air-aspirating sprinklers 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 [Class B Hydrocarbon fuels only]

FOAMING PROPERTIES

Aspirating type discharge devices typically generate expansion ratios between 2-10 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 subsurface applications with polar solvent type fuels.

TYPICAL PROPERTIES AT 77°F [25°C]

| | |
|------------------|-------------------|
| Appearance | Viscous light tan |
| Specific gravity | 0.989 – 1.009 |
| pH | 7.0 – 8.0 |
| Viscosity | 1200 – 1800 cps |

APPLICATION RATES

Recommended application rate on Class B Hydrocarbon fuels is 0.10 gpm / sq. ft. and on Polar Solvent type fuels is 0.15 gpm / sq. ft. On the following specific Polar solvent type fuels these are the recommended minimum application rates:

| | |
|---------------------|--------------------|
| IPA | 0.15 gpm / sq. ft. |
| METHANOL | 0.10 gpm / sq. ft. |
| ETHANOL | 0.14 gpm / sq. ft. |
| METHYL ETHYL KETONE | 0.10 gpm / sq. ft. |
| ETHYL ACETATE | 0.10 gpm / sq. ft. |

ENVIRONMENTAL IMPACT

Micro-Blaze Out PLUS® 3% x 3% AR-AFFF is biodegradable, low in toxicity and can be treated in sewage treatment plants. It contains Micro-Blaze® microbes that will digest the residual Hydrocarbon or Polar Solvent fuels and turn the wastes into harmless carbon dioxide and water.

STORAGE

If kept in the original unopened and air tight Micro-Blaze® supplied container and stored within the temperature range of 35°F – 120°F [2°C – 49°C], a shelf life of 25 or more years can be expected. If the Micro-Blaze Out Plus 3% x 3% 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.

ORDERING INFORMATION

Micro-Blaze Out PLUS® 3% x 3% AR-AFFF is available in 5-gallon pails, 55-gallon drums, and 275-gallon totes or can be shipped bulk.

SHIPPING WEIGHTS

| | |
|---------------|-----------|
| 5 gal. Pail | 44 lbs. |
| 55 gal. Drum | 485 lbs. |
| 275 gal. Tote | 2485 lbs. |

U.L. - 162 TEST RESULTS SUMMARY

Complete test results available upon request.

| Test | Premix Rate (%) | Premix Type | Fuel | Appl. Type | Appl. Rate (gpm/sq. ft.) | Control (min:sec) * | Ext (min:sec) * | 1 st Torch | 2 nd Torch | PASS/ FAIL |
|------|-----------------|-------------|-----------------|------------|--------------------------|---------------------|-----------------|-----------------------|-----------------------|-------------|
| 1 | 3 | Fresh | N-Butyl Acetate | II | 0.06 | 2:54 | 4:14 | No Ign | No Ign | PASS |
| 2 | 3 | Sea | N-Butyl Acetate | II | 0.06 | 2:03 | 4:18 | No Ign | No Ign | PASS |
| 3 | 3 | Fresh | Isopropanol | II | 0.084 | 2:30 | 3:14 | No Ign | No Ign | PASS |
| 4 | 3 | Sea | Isopropanol | II | 0.084 | 2:44 | 3:51 | No Ign | No Ign | PASS |
| 5 | 3 | Fresh | Heptane | III | 0.04 | 1:56 | 2:32 | No Ign | No Ign | PASS |
| 6 | 3 | Sea | Heptane | III | 0.04 | 1:56 | 2:35 | No Ign | No Ign | PASS |

*: includes 1 minute pre-burn time