

# **FOAM CONCENTRATES**

# BFC - 3MS PREMIUM 3% MILITARY SPECIFICATION AQUEOUS FILM FORMING FOAM CONCENTRATE (3% MS-AFFF)

# **DESCRIPTION**

Buckeye Premium 3% MS-AFFF is a premium grade AFFF concentrate designed specially to comply with US MIL-F-24385. It forms a vapor suppressing aqueous film on Class B Hydrocarbon fuel surfaces as the foam solution drains from the foam blanket. It is intended for use at a proportioning rate of 3% (3 parts MS-AFFF concentrate to 97 parts water) on Class B Hydrocarbon type fuels, such as gasoline, kerosene and diesel. Buckeye Premium 3% MS-AFFF is not intended for use on fuels which are polar solvent/water miscible such as alcohols, ketones ethanol and esters.

# **FEATURES**

Buckeye Premium 3% MS-AFFF concentrate appears on the QPL (Qualified Products List) for MIL-F-24385 - latest amendment. Subsequently this product conforms to all performance and compatibility requirements of U.S. Military Specifications MIL-F-24385 -latest amendment.

- U.L. Listed.
- · Suitable for use with either fresh or salt water.
- Excellent wetting characteristics when used in combating Class A type fires.
- Suitable for use with both air-aspirating foam andstandard water fog nozzles.
- Suitable for use with Deluge or Closed-Head Foam Water Sprinkler systems.
- If inadvertently frozen, thawing will render product completely serviceable again.
- Suitable for use with carbon steel, fiberglass, polyethylene, or stainless steel. Buckeye Premium 3% MS-AFFF is not compatible with galvanized pipe or fittings in an undiluted form.
- Suitable for use with dry chemical extinguishing agents.
- U. L. recommended application rate on Class B Hydro-

- carbon type fuels is 0.10/gpm sq. ft. for hoseline and/ or monitor applications
- Conforms to all performance and compatibility requirements of U.S. Military specification Mil-F- 24385 latest amendment.

#### **PROPORTIONING**

Buckeye Premium 3% MS-AFFF is designed for use with the following types of proportioning equipment.

- In-Line Eductors, fixed or portable.
- In-Line Balanced Pressure (ILBP) and pump pressure proportioning skid.
- Bladder tank Balanced Pressure proportioning systems.
- Around-the-Pump proportioners.
- Handline, air-aspirating nozzles with fixed eductor pickup tube.

# **DISCHARGE DEVICES**

Buckeye Premium 3% MS-AFFF is suitable 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 type fuels only.)



#### **APPLICATIONS**

Buckeye Premium 3% MS-AFFF will provide quality protection for a wide range of hazardous areas such as:

- Crash Fire Rescue.
- Storage tanks (nonpolar solvent type fuels only.)
- · Truck/Rail loading or unloading facilities.
- Processing/Storage facilities.
- Docks/Marine tankers.
- Flammable liquid containment areas.
- Mobile equipment.

# **PERFORMANCE**

To ensure the fire fighting performance requirements required in today's environment, Buckeye fire tests their Premium 3% MS-AFFF to the fire performance requirements of:

U.L. 162.

UK. Ministry of Defense 42-24.

U.S. Military Specification MIL-F-24385 latest amendment.

# **FOAMING PROPERTIES**

Aspirating type discharge devices typically generate expansion ratios between 2-10 to 1 when Premium 3% MS-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 devices, flow rate and discharge pressure.

# TYPICAL PROPERTIES AT 77°F (25°C)

Appearance	Colorless
Specific Gravity	1.010 - 1.030
рН	7.0 - 8.0
Viscosity	2 - 8 cps

## **COMPATIBILITY**

Buckeye Premium 3% MS-AFFF is compatible with any other 3% AFFF manufactured in accordance with and conforming to all performance requirements of U.S. Milspec Mil-F-24385 latest amendment or any preceding version of this specification.

# **ENVIRONMENTAL IMPACT**

Buckeye Premium 3% MS-AFFF is biodegradable, low in toxicity and can be treated in sewage treatment plants. Refer to Buckeye Technical Bulletin regarding foam products and the environment.

# **STORAGE**

If kept in the original manufacturer's 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. When stored in other than the manufacturer's supplied container, check with Buckeye for storage guidelines.

# **ORDERING INFORMATION**

Buckeye Premium 3% MS-AFFF is available in 5 gallon plastic pails, 55 gallon plastic drums, 275 gallon plastic totes or can be shipped in bulk.

Part No. 50285	5 Gal. Pail (19 L)
Part No. 50290	55 Gal. Drum (205 L)
Part No. 50295	275 Gal. Tote (1042 L)

## **SHIPPING WEIGHT**

5 Gal. Pails 44 lbs. 55 Gal. Drum 485 lbs. 275 Gal. Tote 2485 lbs.

