



VERDE ENVIRONMENTAL, INC.

## Class A & B Wetting Agent

### Micro-Blaze Out® Fire Fighting Agent

#### Description:

**Micro-Blaze Out®** is a multi-purpose fire fighting concentrate, microbial waste digester and odor controller for use by dilution with water in fixed or mobile fire suppression equipment, fixed or mobile systems. **Micro-Blaze Out®** is U.L. Classified as a Wetting Agent under NFPA 18 Revised 2006 Standards for use on Class "A" and Class "B" fires. **Micro-Blaze Out®** is **Patented** and contains a bio-chemical formulation of biological activators and scientifically selected bacteria which digest organic waste, including hydrocarbons, after the fires are extinguished.

**Micro-Blaze Out®** (MBO) improves the penetrating capability of water alone by reducing the surface tension of water, thereby increasing the penetration of surfaces that water alone may otherwise simply run off. This allows the MBO and water to reach deep-seated fires and extinguish the fires quickly while using much less water. **Micro-Blaze Out®** increases the heat absorbing capabilities of water thereby greatly reducing temperatures as it is applied.

The uniqueness of **Micro-Blaze Out®** that sets it apart from any other Wetting Agent or Class A Foam or Class B Foam is its patented formulation containing microbes. These are natural, non-toxic, and non-pathogenic microbes which will clean up the organic waste caused by the fire and will immediately begin the process of bioremediation and restoring the eco system that was damaged by hydrocarbon spills, fires, and run-off.

#### Features:

- U.L. Classified as a Class A & Class B Wetting Agent in accordance with ANSI/NFPA 18-2006
- Contains Micro-Blaze® microbes for remediation of organic and hydrocarbon wastes, making it a superior environmental foam.
- Suitable for use with fresh, brackish and sea water.
- Excellent wetting agent.
- Contains NO alcohols.
- Environmentally friendly.
- Reduces clean-up cost.
- Primary product component is on the EPA NCP List as a bioremediation agent.
- Will not hamper arson investigations.
- **Patented** Microbial firefighting agent.

#### Suggested Proportioning Settings:

**Micro-Blaze Out®** is proportioned with water at 1% for Class A materials and 3% for Class B liquids (non water soluble).

#### Typical Physical Properties:

Appearance.....	Off white, opaque
Specific Gravity.....	1.01 – 1.02
pH @ 65° F +/- 5° F.....	6.5 to 7.5
Freezing Point.....	25° F (-4° C)
Min. Usable Concentrate Temp.....	35° F (2° C)
Max. Usable Concentrate Temp.....	120° F (49° C)
1% Solution Viscosity @ 70° F (21° C).....	47.4 cps
Surface Tension @ 1% .....	31.8 Dynes/cm
Freeze/ Thaw .....	No Effects on Concentrate of Solution Properties
Corrosion:	
In Concentrate .....	Non-corrosive
At 1% Solution ....	Non-corrosive
At 3% Solution ....	Non-corrosive

#### Application Rates:

- Structures – 1%
- Tires – 1%
- Vehicles – 1%
- Liquid Hydrocarbon Spills – 1%
- Liquid Hydrocarbon Fires – 3%

#### Storage, Handling and Shelf Life:

**Micro-Blaze Out®** should be stored in its original shipping container or in tanks or other containers which have been designed for such foam storage. The recommended storage temperature range for **Micro-Blaze Out®** is 35° F (2° C) to 120° F (49° C). A shelf life of over 10 years can be expected. Foam concentrates are subject to evaporation which accelerates when the product is exposed to air. Storage tanks should be sealed and fitted with a pressure vacuum vent to prevent free exchange of air. **Micro-Blaze Out®** foam concentrate is not affected by freeze/thaw cycles and the fire fighting characteristics will not be compromised

**This product does NOT contain reportable components under SARA Title III, Section 313 of 40 CFR-372 or CERCLA.**

## **Environmental and Toxicological Information:**

**Micro-Blaze Out**<sup>®</sup> is fully biodegraded because of our Micro-Blaze<sup>®</sup> microbes and because the individual ingredients contain no harmful components to the environment. As with any product, however, care should be exercised to prevent any discharge from entering ground water, surface water, or storm drains. Discharges of **Micro-Blaze Out**<sup>®</sup> can be treated by local biological sewage treatment systems because of the Micro-Blaze<sup>®</sup> microbes. These microbes will actually enhance and help the waste water treatment facility.

Toxicity testing on **Micro-Blaze Out**<sup>®</sup> concentrate, as well as the pre-mixed diluted solutions of MBO have shown that it is negative for acute oral toxicity; negative for acute dermal toxicity; and negative for primary dermal irritation. **Micro-Blaze Out**<sup>®</sup> is considered to be mildly irritating for primary eye irritation.

## **Applications:**

**Micro-Blaze Out**<sup>®</sup> is the world's only patented microbial "Wetting Agent". It contains surfactants (foaming agents and emulsifiers) that increase the penetrating and spreading capability of plain water, as well as Microbes that will digest toxic hydrocarbons and other organic wastes into harmless carbon dioxide and water. This unique formulation makes **Micro-Blaze Out**<sup>®</sup> the best foam of choice by having the greatest impact on cleaning up the environment after a fire on the following type applications:

### ***Structural Fires:***

**Micro-Blaze Out**<sup>®</sup> (MBO) can be pre-mixed, batch mixed, educted, or injected into a water stream. MBO can be dispensed through aspirating nozzles, non-aspirating nozzles, CAFS, and dropped from aircraft to extinguish Class A fires at a 1% solution. When properly mixed and applied MBO is unsurpassed in its ability to penetrate into a deep seated Class A fire material. It will result in quicker knock-down, less water used, less water damage, less heat generated, and less time in the overhaul stage. This will further reduce stress on valuable personnel and costly equipment.

### ***Tire Fires:***

**Micro-Blaze Out**<sup>®</sup> (MBO) can be used on tire fires in a 1% to 3% solution. MBO's ability to increase the penetrating power of water and to cool the burning tires make it an excellent product for this type of application. MBO has the ability to reduce the enormous negative impact that burning tires have on the environment by extinguishing the fires rapidly, using less water, having much less run-off, and by having billions of hydrocarbon digesting microbes in each gallon of this patented product.

## ***Hydrocarbon Spill Fires:***

**Micro-Blaze Out**<sup>®</sup> (MBO) can be used on hydrocarbon spill fires at a 1% to 3% solution mixed in water. MBO is most effective when applied directly into the spill fire in an agitating motion. A 1 to 10 ratio mixture (1 gallon of MBO concentrate for each 10 gallons of spilled fuel on fire) then diluted at 1% to 3% is required to render the fuels non flammable and to bio-remediate the remaining fuels. This dilution rate will also put the hydrocarbons into a digestible form for rapid degradation by the Micro-Blaze<sup>®</sup> microbes.

## ***Industrial:***

**Micro-Blaze Out**<sup>®</sup> (MBO) is the ideal product for use in situations where the primary concern is runoff getting into the facility waste stream and going to the wastewater treatment plant. MBO's unique patented formulation of surfactants and microbes will degrade a wide range of hydrocarbon and organic materials. At a 1% to 3% mixture with water will extinguish Class A and Class B fires, control and eliminate dangerous vapors and spills, and will reduce the enormous expense of clean up associated with traditional foams and spill agents.

## ***Transportation Accidents:***

**Micro-Blaze Out**<sup>®</sup> (MBO) mixed at 1% to 3% is ideal for use on automobiles, trucks, trains, farm equipment, aircraft, and bus accidents involving many different types of chemical hydrocarbons. MBO used in the proper proportions can quickly extinguish the fires associated with these types of instances. MBO can enhance emergency crews ability to rapidly restore traffic flow through its ability to penetrate and emulsify the spill for rapid removal.

## ***Barn and Hay Fires:***

**Micro-Blaze Out**<sup>®</sup> (MBO) at a 1% solution in water is very effective on hay fires. MBO's rapid ability to knock down and penetrate into deep seated fires makes it an ideal choice for the farming and ranching industry. The microbes in MBO will consume all surfactants in five to seven days, making the hay safe to be eaten. Also the microbes in MBO are the same types widely used in the cattle feed to enhance the digestive system in cattle.

## ***Mining Industry:***

**Micro-Blaze Out**<sup>®</sup> (MBO) is an ideal product for use in the mining industry. MBO mixed at a 1% to 3% solution with water can be used to extinguish fires, control dust, and help control run off.

## **Ordering Information:**

Micro-Blaze Out<sup>®</sup> is available in 5-gallon pails, 55-gallon drums and 275-gallon totes.

D.O.T. shipping is under Class 55: Non-Hazardous Shipment.