

FireFilm®-AG Class "A" Foam Environmentally Responsible Formulation

● Description

Environmentally responsible FireFilm-AG, Class A foam concentrate. FireFilm-AG is designed for use in Class A/B foam systems and is excellent for Compressed Air Foam Systems (CAFS).

FIREFILM-AG foam concentrate works in two ways. First, FIREFILM-AG improves the penetrating capability of water. It reduces the surface tension of plain water which allows it to penetrate surfaces where water might normally run off, to reach deep-seated fires. This helps reduce the amount of water required to extinguish the fire and also provides quicker knockdown. Secondly, FIREFILM-AG increases the heat absorbing capabilities of water. Foaming ingredients give water the ability to adhere to vertical surfaces which allows the water longer contact with the fuel.

The longer the water is in contact with the fuel, the more heat it is able to absorb. A coating of Class A foam may also be used for exposure protection to prevent fuels from igniting by raising their moisture content and providing a tough protective barrier to an oncoming flame front.

● Features

- Environmentally responsible formulation. .
- Premix is stable for more than 30 days (using potable water), which is significantly longer than traditional Class A foam solutions. .
- Emulsifies Class B Hydrocarbon fuels. .
- Contains NO alcohols for higher flash point and compatibility with Class A/B Systems. .
- Can be used with fresh, brackish and sea water, plus
- Exhibits good foam ability, even in cold water.

● Applications

- Structural Fire Fighting.
- Forestry.
- Mining.
- Industrial.
- Tire Fires.
- Hydrocarbon Spill Control.

● Typical Physical Properties

Appearance.....	Colorless Liquid
Specific Gravity @ 77°F (25°C)	1.05
pH	8.2
Minimum Usable Concentrate Temp.	2°C
Maximum Usable Concentrate Temp....	49°C
Freezing Point.	-5°C
Viscosity @ 77°F (25°C)	20 csks
Freeze/Thaw:	No Effects on Concentrate Properties

● Typical Proportioning Settings

Class B, Hydrocarbon Spill Emulsification	0.3%
Structural Fire, Attack and Overhaul	0.5%- 0.7%
Heat Exposure Protection,	0.7%-1.0%
Compressed Air Application	0.1-0.5%
Air Attack: Water Bombers/Helicopters	0.3%-0.6%

● Suggested Structural Fire Application Rates

Fully Involved, Well Vented	0.33 gpm/sq. ft.
Half Involvement	0.17 gpm/sq. ft.
Quarter Involvement	0.09 gpm/sq. ft.
Overhaul.....	5-10 gpm/sq. ft.

FIREFILM-AG can also be used as a training foam for non-fire scenarios proportioned at 1%, 3% or 6% to provide foam expansion similar to AFFF foam concentrates.

● Designed to meet:

NFPA 18
GB 27897-2011

● Compatibility

FIREFILM-AG is specially formulated not to cause an adverse reaction with Alcohol Resistant-AFFF foam concentrates should the two agents come in contact within the piping of a Class A/B foam system. Many Class A foam concentrates contain significant amounts of alcohol in their formulation. If they come in contact with Alcohol Resistant-AFFF foam concentrates,

activation of the alcohol resistant polymer may occur, which can result in globules that clog small passages in the foam proportioning equipment.

It is recommended that FIREFILM-AG not be mixed with any other type of foam concentrate in long term storage. Such mixing could lead to chemical changes in the product and a possible reduction in or loss of its firefighting capability. Most expanded foams are compatible for side-by-side application during an incident.

● **Storage and Handling**

The recommended storage temperature range for FIREFILM-AG concentrate is 35°F (2°C) to 120°F (49°C). FIREFILM-AG foam concentrate is not affected by freeze/ thaw cycles, and it has unique premix stability properties. Samples of FIREFILM-AG, premixed with potable municipal water supplies, have been shown to be stable and not suffer any significant loss of expansion or drainage properties after 30 days. Actual results may vary based on the water supply.

FIREFILM-AG should be stored in its original shipping container or in tanks or other containers which have been designed for such foam storage. Recommended construction materials are stainless steel (Type 304L or 316), high density cross-linked polyethylene, or reinforced fiberglass polyester (isophthalic polyester resin) with a vinyl ester resin internal layer coating (50 -100 mils).

● **Shelf Life, Inspection, and Testing**

The shelf life of any foam concentrate is maximized by proper storage conditions and maintenance. Factors affecting shelf life are wide temperature changes, extreme high or low temperatures, evaporation, dilution, and contamination by foreign materials. The expected shelf life of FIREFILM-AG foam concentrate is 10 years or more, if stored properly, according to the manufacturer's recommendations. Should the concentrate become contaminated, testing to ensure original foam concentrate physical properties is a service available.

● **Environmental and Toxicological Information**

FIREFILM-AG is biodegradable. However, as with any substance, care should be taken to prevent discharge from entering ground water, surface water, or storm drains. With advance notice, FIREFILM-AG foam concentrate or foam solution can be treated by local

biological sewage treatment systems. Since facilities vary widely by location, advance notice should be given, and disposal should be made in accordance with federal, state, and local regulations.

FIREFILM-AG has not been tested for acute oral toxicity, primary skin and primary eye irritation. Repeated skin contact will remove oils from the skin and cause dryness.

FIREFILM-AG is classified as a primary eye irritant, and contact with the eyes should be avoided. Users are advised to wear protective eyewear. If the foam concentrate enters the eyes, flush them well with water and seek immediate medical attention. For further details see the FIREFILM-AG Material Safety Data Sheet.

● **Ordering Information**

FireFilm-AG is packed in 25 litre or 200 litre high density polyethylene containers sealed with tamper evident caps.

25 litre pails-----gross weight 28 kg

200 litre drums ----- gross weight 220 kg

● **Shipping Cube**

25 litre Pail _____ (0.032cu.m)

200 litre Drum _____ (0.326cu.m)