# **AFFF 1%**

### **DESCRIPTION**

**FILMPLUS NF1-C6 AFFF 1%** is a superior quality aqueous film forming foam which is designed to extinguish hydrocarbon fuel fires. It is formulated based on C6 fluorosurfactants which are safer to the environment.

AFFF foam concentrate are designed for rapid fire knockdown by producing a thin aqueous film which helps to prevent the release of fuel vapors. The foam blanket from which the film forming liquid drains separates oxygen from the fuel surface, extinguishes the fire and prevents re-ignition. The water content of the foam provides a cooling effect.

The aqueous film is produced by the fluorocarbon surfactant reducing the surface tension of the foam solution to a point where the solution can be supported by the surface tension of the fuel.

**FILMPLUS NF1-C6 AFFF 1%** provides excellent penetrating and wetting qualities when used on Class A fires. This is important when extinguishing deepseated fires in wood, paper, rubber and other ordinary combustibles.

## **FEATURES**

- UL Listed Foam Liquid Concentrate
- Made from C6 based Fluorosurfactants
- Suitable for use with either fresh or salt water
- Suitable for use with both aspirating foam and standard 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 fiber glass, polyethylene or stainless steel. It is not compatible with galvanized pipe or fittings in an undiluted form
- Suitable for use with siliconized dry chemical extinguishing agents
- U. L. recommended minimum application rate on hydrocarbon type fuels is 0.10gpm/ft²

# **PROPORTIONING**

**FILMPLUS NF1-C6 AFFF 1%** 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 skid
- > Bladder tank proportioning systems
- ➤ Handline, air-aspirating nozzles with fixed eductor pickup tube
- > Around the pump proportioners

### **DISCHARGE DEVICES**

**FILMPLUS NF1-C6 AFFF 1%** is recommended for use with the following airaspirating 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)

# **APPLICATIONS**

**FILMPLUS NF1-C6 AFFF 1%** will provide quality protection for a wide range of hazardous areas such as:

- > Crash fire rescue
- Storage tanks (non-polar solvent type fuels only)
- Truck/Rail loading or unloading facilities
- ➤ Processing/Storage facilities
- Docks/Marine tankers
- > Flammable liquid containment area
- ➤ Mobile equipment

# **UL Listed C6 Foam Concentrate**

### TYPICAL SPECIFICATION

**AFFF** Product Use Concentration 1% Specific Gravity @ 20°C  $1.04 \pm 0.02$ pH @ 20°C  $8.0 \pm 1.0$ Viscosity @ 20°C < 10 cSt Pour Point Flows at -8°C >7

\*Foam Expansion

\*Foam Drainage 25% 2 minutes min. Spreading Coefficient > 3 dynes/cm

\*Expansion & Drainage values depend on the equipment & the application conditions

### **PERFORMANCE**

The fire performance of FILMPLUS NF1-C6 AFFF 1% is measured against Underwriters Laboratories Standard UL 162-7th Edition.

### **ENVIROMENTAL IMPACT**

FILMPLUS NF1-C6 AFFF 1% is biodegradable, low in toxicity and can be treated in sewage treatment plants.

### STORAGE AND HANDLING

FILMPLUS NF1-C6 AFFF 1% may be stored in its shipping container without change in its original physical or chemical characteristics. Shelf life is expected to be 10 years or more when stored at recommended temperatures and in containers or suitable storage tanks. It does not show significant sedimentation or precipitation in storage or after temperature cycling. Freezing and thawing have no effect on performance and the concentrate proportion satisfactorily in ordinary equipment at temperatures above -6.6°C

Synthetic foam concentrate should only be stored in stainless steel (Type 304L or 316), reinforced fiberglass polyester with a vinyl ester resin internal layer coating or plastic containers.

# ORDERING INFORMATION

FILMPLUS NF1-C6 AFFF 1% is available in 20 Liters Jerry Can (or) 200 Liters Drum. Other packing as per customer requirements can also be done.

Part No. FILMPLUS NF1-C6 AFFF 1%- J 20L Part No. FILMPLUS NF1-C6 AFFF 1%- D 200L

### **APPROVAL**

UL (USA) Quality Standard UL 162

- :- Foam Quality Tests
- :- Class B Fire Test
- :- Foam Identification Tests
- :- Test of Shipping Containers



NOTE: We reserve the right to modify specification without prior notice.

NFDS::AFFF1C6::VER3::JUL 18

**UL Listed C6 Foam Concentrate**