FireFilm®-HG 2% High Expansion Foam
Environmentally Responsible Formulation

Description

Environmentally Responsible FIREFILM-HG 2% is the next generation in high expansion foam concentrates. This new formulation demonstrates SKFF fire's commitment to fire fighting and environmental responsibility.
FIREFILM-HG 2% is a superior quality synthetic foam concentrate used at 2.0% concentration for extinguishing fires where total flooding application is desired. Foam generated from FIREFILM-HG 2% effects extinguishment in two ways: total flooding of the involved area limits the amount of oxygen required to support free combustion and provides a slow, continuous release of foam solution for cooling and penetration. FIREFILM-HG 2% is listed for use on Class A and hydrocarbon fuels when used in conjunction with High Expansion Foam Generators.

Features

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- Stable, extremely long lasting, uniform bubble structure.
- Suitable for use with fresh or sea water.
- Compatible with standard proportioning equipment.
- Suitable for use with foam compatible dry powder extinguishing agents.
- Excellent wetting and penetrating capabilities when used in combating Class A fires.
- Low temperature stability and performance.
- Conforms to the corrosion requirements of Boeing D6-17487 Rev P, Fire Extinguishing Foams and Liquids, when used at 2% dilution.

  FIREFILM-HG 2% is a low energy foaming agent, designed for use with high expansion equipment. The special surface-active agents in FIREFILM-HG 2% give the foam the ability to drain very slowly when used with high expansion generators. This gives the finished foam the ability to travel long distances and retain water to provide effective fire fighting capabilities.

Applications

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FIREFILM-HG 2% is suitable for use in combating fires in buildings, process areas, warehouses, aircraft hangar systems, or anywhere total flooding is desired. High expansion foam systems can be used for protection of LNG storage areas by quickly blanketing the flammable liquid surface, and helping to control vapor release.
FIREFILM-HG 2% also demonstrates excellent wetting capabilities when used as a wetting agent in combating class A fires. Although developed for use in high expansion foam generating equipment, FIREFILM-HG 2% can be used in both medium and low expansion foam equipment.

Typical Physical Properties

Appearance.....Colorless Liquid
Specific Gravity @ 77°F (25°C) 1.03
pH 8.0
Minimum Usable Concentrate Temp. .... 2°C
Maximum Usable ConcentrateTemp.... ... .49°C
Freezing Point. .... -2°C
Viscosity @ 77°F (25°C) ..... 5 csks
Freeze/Thaw: ..... No Effects on Concentrate Properties
Expansion 400-900
50% drainage time 15

Standard and Listings

UL-139
GB 15308-2006

FireFilm-HG has successfully passed Chinese GB test criteria for use at 2% concentration on hydrocarbons, including application through a proportioning and foam making discharge devices using fresh or sea water. Consult SKFF for a complete list of these devices..

It is recommended that FIREFILM-HG 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-HG concentrate is 35°F (2°C) to 120°F (49°C). FIREFILM-HG foam concentrate is not affected by freeze/ thaw cycles, and it has unique premix stability

properties. Samples of FIREFILM-HG, 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-HG 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-HG foam concentrate is 15 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-HG 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-HG 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-HG 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-HG 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-HG Material Safety Data Sheet.

- **Ordering Information**

FireFilm-HG 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 **216** kg

Palletizing of pails and wooden case packing can be provided upon request.

- **Shipping Cube**

25 litre Pail ---------- (**0.032cu.m**)

200 litre Drum ---------- (**0.326cu.m**)