

DATA SHEET #AFC200

PETROSEAL 3% FFFP

Description

Petroseal 3% is a superior quality Film-Forming FluoroProtein (FFFP) fire fighting foam concentrate for extinguishing and securing flammable hydrocarbon liquid fires.

Its unique formulation is based on advanced protein foam technology. The protein base material provides a tough cohesive foam blanket with high resistance to heat that provides the same post-fire security as a top quality FluoroProtein (FP). Fluorochemical surface active agents combined with the protein base produce a vapor-sealing aqueous film that provides the same fast control and extinguishment as a top quality synthetic AFFF.

- Film-forming for fast flame knockdown and extinguishment.
- Stable and long-lasting foam blanket for excellent burnback resistance and post-fire security.
- Detergent-free for high resistance to fuel pick-up.
- Foam blanket re-seals when ruptured by personnel or equipment.
- Reduced stocks, low cost storage, long shelf-life, and low usage levels combine to provide maximum cost-effectiveness.

Environment

Petroseal 3% is readily biodegradable and virtually non-toxic to aquatic organisms. It is based on a natural protein foaming agent and contains no harmful synthetic detergent or glycol ether.

Petroseal 3% can be successfully treated in biological waste water treatment systems.

Applications

Petroseal 3% is the ideal fire fighting foam to use in high risk situations where hydrocarbon (such as aviation kerosene, crude oil, gasoline, and diesel fuel) are stored, processed, or transported. It is used extensively on Rapid Intervention Vehicles at major international airports and military bases where fast extinguishment and post-fire security with limited quantities of foam concentrate are essential. Other typical applications include hydrocarbon storage tanks, process areas, road/rail loading racks, marine terminals, and offshore platforms.

Petroseal 3% also provides a vapor-suppressing foam blanket on unignited hydrocarbon spills. Its detergent-free formulation ensures that it does not exhibit the wicking action associated with some synthetic AFFFs when applied using non-aspirating foam equipment.

Performance

Petroseal 3% is produced to rigorous quality control standards which ensure consistent fire performance and excellent product reliability.

The fire performance of Petroseal 3% is measured primarily against Underwriters Laboratories Standard UL 162 (7th Edition). It has also demonstrated outstanding performance in fire tests carried out by independent fire authorities worldwide.

Approvals and Listings

- UL Listed.

Equipment

Petroseal 3% is intended for use at 3% (3 parts concentrate to 97 parts of water).

It is readily proportioned using conventional foam proportioning equipment such as portable and fixed (in-line) foam venturi proportioners, handline nozzles/branchpipes with pick-up tubes, balanced pressure variable flow proportioners, balanced pressure bladder tank proportioners, and around-the-pump proportioners.

Petroseal 3% can be used with air aspirating discharge devices such as low expansion branchpipes, monitors, top pourer sets, rimseal foam pourers, and foam/water sprinklers.

As with any foam Petroseal 3% is best applied gently on to the burning liquid surface. However, the exceptional resistance to fuel contamination of FFFP enables it to withstand vigorous mixing with fuel (this is recognized by NFPA 11(1994), Section 1.4, page 6). This makes it ideal for forceful application on to storage tank fires from ground-based mobile monitors or through base (sub-surface) injection systems.

Petroseal 3% also produces top quality medium expansion foam when applied through medium expansion branchpipes and bund pourers.

Petroseal 3% can be used with non-aspirating discharge devices such as spray/fog branchpipes and nozzles, monitors, and spray/fog sprinklers. Non-aspirated application is not recommended as the primary method of attack for major fires where the security of a stable foam cover is essential.

Compatibility

Petroseal 3% is suitable for use in combination with:

- Soft or hard, fresh, brackish or sea water.
- Dry powder extinguishing agents either separately or as twin agent systems.
- Expanded protein-based or synthetic foams for application to a fire in sequence or simultaneously.

Typical Physical Properties

Appearance	Dark Brown Liquid
Specific Gravity @ 68°F (20°C)	1.160
pH @ 68°F (20°C).....	7.2
Viscosity @ 68°F (20°C)	27.0 csks (27.0 mm ² /sec)
Maximum Usable Temperature.....	120°F (49°C)
Minimum Usable Temperature.....	20°F (-7°C)
Freeze Point	1°F (-17°C)
Effect of Freeze/Thaw	No Performance Loss

Storage

Petroseal 3% foam concentrate is exceptionally stable in long-term storage. A shelf-life of at least ten years can be expected if it is stored properly.

Ordering Information

CONTAINER	SHIPPING WEIGHT	PART NUMBER
5-Gallon Pails		
(19 liters)	51 lb. (23.1 kg)	3133-4340-6
55-Gallon Drums		
(208 liters)	557 lb. (252.7 kg)	3133-4481-6
275-Gallon IBC Reusable Tote Tank		
(1041 liters)	2816 lb. (1277.3 kg)	3133-4725-6
Bulk	9.7 lb./gal (1.16 kg/l)	3133-4001-6

Palletizing of pails and drums is available upon request.

Shipping Cube

5-Gallon Pail.....	1.13 cu. ft. (0.032 cu. m.)
55-Gallon Drum	11.51 cu. ft. (0.326 cu. m.)
275-Gallon IBC Tote Tank	51.11 cu. ft. (1.061 cu. m.)

This information is only a general guideline. The company reserves the right to change any portion of this information without notice. Terms and conditions of sale apply and are available on request. 10/07 Rev. B Printed in USA AFC200.QXD

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