TECHNICAL DATA SHEET

PRODUCT : AQUEOUS FILM FORMING FOAM (AFFF)
BRAND NAME : SAFEGUARD AFFF-1%
MANUFACTURED BY : Safeguard Fire Protections Pvt. Ltd,
B-3, Mangolpuri Indl. Area, Phase-II, Delhi-110083.

PRODUCT DESCRIPTION:

SAFEGUARD AFFF-1% is a superior quality firefighting foam concentrate for extinguishing and securing flammable hydrocarbon and select oxygenated fuel based fires. It is mainly formulated by hydrocarbon surfactants, fluorocarbon surfactants, solvents, preservatives and buffers that are used to effectively extinguish hydrocarbon fuel based fires and have a secondary benefit of preventing re-ignition.

FEATURES:

i. It produced a thin aqueous film which spreads across the surface of the fuel, separating the fuel from oxygen. It has superior knock down, burn back properties and post fire security.
ii. It is suitable for extinguishing & securing flammable hydrocarbon fuel fires as 1%, 3% and 6% as applicable.
iii. It can be used with fresh, brackish & sea water. It is compatible with all dry chemical powders extinguishing agent.

APPLICATIONS:

It is used in high risk areas where various types of hydrocarbon fuels and chemicals are stored, processed, or transported. Typical applications include fuel storage tanks, process areas, power stations, marine terminals and offshore platforms.

PROPORTIONING:

SAFEGUARD AFFF-1% can be correctly proportioned using most conventional, properly calibrated, in-line proportioning equipment such as:

- Balanced and in-line balanced pressure pump proportioners
- Balanced pressure bladder tanks and ratio flow controllers
- Around-the-pump type proportioners
- Fixed or portable in-line venturi type proportioners
- Hand line nozzles with fixed eductor/pick-up tubes

TYPICAL PHYSICAL & CHEMICAL PROPERTIES:

- Appearance : Amber liquid
- pH : 6.5 – 8.5
- Expansion : >8.0
- 25% drainage time : > 90 sec
- Viscosity : < 20 cps
- Spreading coefficient : > 3.0
- Fire performance : Meet US spec.

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MIXING RATIO: SAFEGUARD AFFF-1% shall be diluted with water as 99 parts water & 1 part AFFF

ENVIRONMENTAL IMPACT:

SAFEGUARD AFFF-1% is biodegradable, low in toxicity. It and can be treated in sewage treatment plants in consultation with relevant local authority.

STORAGE & HANDLING:

The storage place shall be free from dampness and shall be well ventilated and the containers shall not be directly exposed to the sunrays. The HDPE container (20/30 ltr capacity) shall be preferably stacked in single layer and shall not exceed more than 2 layers.

Recommended storage temperature: (-) 5^0C to 49^0C

Storage tanks for bulk storage: Foam concentrates are suitable for transferring into bulk storage tank for long term storage but these should be normally be kept full, with space (5-10% of tank volume) should be maintained for thermal expansion coefficient of material of construction and foam concentrate. Inlet pipe work should be located at the base of storage tank to avoid excessive foaming during filling. Outlet pipe work should be located above the base of the tank to avoid clogging in the event of sediment that might have formed.

Materials of construction

Storage tank should be fabricated or based with the following materials:

- Mild Steel (Uncoated): Not recommended as foam concentrates will cause initial etching which affect the tank to some extent.
- Stainless Steel: 304 and 316 (HIGHLY RECOMMENDED)
- Glass Reinforced Plastic (GRP) : Fiberglass with Isophthalic Polyester Resin, Expoxy Resin or Vinylester Resin (Premium).Not recommended for foam systems involving pressure displacement
- Polyethylene : High density cross linked polyethylene (HDPE) (HIGHLY RECOMMENDED)

MARKING/APPROVAL:

UL listed & LR APPROVED

CONFORMING STANDARD:

US-MIL, ICAO, FM, DEF.STAN & EN

PACKING:

20 L, 30 L, 200 L HDPE containers or as per customer requirements.