

STP

DESCRIPTION

BoldFoam STP is a synthetic foam based on hydrocarbon surfactants, glycols and additives.

The solutions of BoldFoam STP simulate an AFFF specifications with a similar expansion index and drainage. Nevertheless, due to the absence of fluorinated surfactants, its oleophobic character is much lower, so it is advised not to use in real fires.

It is suitable for use with fresh, sea or brackish water.

APPLICATION

The physical characteristics of BoldFoam STP are very similar to the AFFF ones and it is a much more economic option. That is why it is ideal to be used as a Training Foam, in Fire Brigades Training Facilities and other educational institutions that run anti-fire tests. It is not recommended to be used in real fires.

Due to its properties, the foam made with this concentrate can be used in training foams with traditional equipment of AFFF solutions, aspirants (fog/stream nozzles or sprinklers) and compressed-air-systems CAFS. In this sense, the firefighters get familiar with the normal equipment and can test and learn the different techniques of foam application.

This is about having a foam that does not contain any fluorinated surfactant, because they raise the price and they also have a worse degree of biodegradability in comparison with common surfactants. In such a manner, we get a foam that is far easier to clean in the training area after the exercises, or when it has to be taken to the water treatment plant.

TECHNICAL INFORMATION

TRAINING FOAM

DOSAGE

BoldFoam STP is used at:

- 3% (3 parts of the product each 97 parts of water) for use in mid and high expansion.
- 1% (1 part of the product each 99 parts of water) for use in low expansion.

TYPICAL PHYSICAL PROPERTIES OF THE CONCENTRATE

Appearance	Amber Liquid
Density, 20 °C g/cm ³	1,020 ± 0,005
pH, 20 °C	7,5 ± 0,5
Kinematic Viscosity, 20°C	≤ 10 mm ² /s
Freezing Point	≤ -1°C

FOAM SOLUTION PROPERTIES

Induction rate	1/3%
Surface Tension (1%, deionized water), mN/m	≤ 30
Low Expansion Rate (1%, fresh and sea water)	≥ 6
Mid Expansion Rate (3%, fresh and sea water)	≥ 100
High Expansion Rate (3%, fresh and sea water)	≥ 300

FIRE PERFORMANCE

- BoldFoam STP is certified by MPA Dresden according to the requirements of:
- EN 1568-3:2018 (1%) Class IIID

COMPATIBILITY WITH OTHER CONCENTRATES

BoldFoam STP should not be mixed nor stored with other firefighting foams without contacting VS FOCUM previously.

The equipment used should be cleaned thoroughly after use, to avoid wrong results on the tests.

COMPATIBILITY WITH MATERIALS

BoldFoam STP is compatible with Standard Carbon Steel “black” pipe and pipe manufactured from various Stainless Steel or Brass Compounds. Other recommended materials are Polyethylene and Aluminium.

Galvanized pipe and fittings must not be used in areas where undiluted concentrate will contact them, since corrosion will result.

SHELF LIFE

The factors affecting shelf life and stability for BoldFoam STP are the following ones: temperatures exceeding the recommended limits or contamination due to unknown materials.

The shelf life of BoldFoam STP is about 20-25 years if the product is stored correctly according to the recommendations of VS FOCUM.

The National Fire Protection Association (NFPA) recommends a yearly analysis of every firefighting foam if the concentrate is not stored in its original container.

STORAGE AND HANDLING

BoldFoam concentrates should be stored in its original shipping containers or in other specially designed containers for this type of products (stainless steel or epoxy lined tanks).

Place the storage containers in an area at temperatures between 0°C and 50°C, correctly closed to avoid the evaporation of the concentrate.

If the product gets frozen during storage or transportation, it must be fully defrosted before use. It is advised a mixing process of the product once defrosted.

ENVIRONMENTAL/TOXICOLOGICAL PROPERTIES

1. Aquatic Toxicity.

BoldFoam STP does not need a large quantity of oxygen to be degraded, so it will not produce a drop in the oxygen concentration level in water.

BoldFoam STP’s presence does not affect unfavourably nor the sensitive species, nor tolerant species on aquatic life.

2. Persistence and Degradability.

BoldFoam STP does not contain persistent organic substances. BoldFoam STP is a fluorine-free foam. BoldFoam STP has a TOPA test (TOP – Total Oxidisable Precursor).

BoldFoam STP does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) n°. 1272/2008.

BoldFoam products are easily biodegradable.

3. Sewage Treatment Plant Treatability.

Due to this training foam having a low biological oxygen demand (BOD), about 10 times lower than an AFFF, it is not necessary an additional input of oxygen in the treatment plant.

BoldFoam STP is not especially toxic to the microbial populations normally found in treatment plants.

Compatible with treatment plant’s flora. Anti-foam agents can be used to reduce foaming in waste streams.

4. Nutrient Loading.

An algal bloom is not expected as BoldFoam STP does not contain any nitrates or phosphates and the quantity of organic carbon is extremely low.

ORDERING INFORMATION

BoldFoam products are available in plastic Pail (20, 25 or 60 L), Drum (200 L), Container (1000 L) and Bulk.

