NATIONAL FOAM

DATA SHEET
#NFC710

TRAINING FOAM

Description

National Foam's Training Foam is designed to provide fire departments and training institutions with an inexpensive training alternative. The concentrate has proportioning characteristics similar to AFFF foam concentrates and provides an expanded foam blanket when used with air aspirating application devices.

Training Foam is readily biodegradable. It is designed for use at a 3% or 6% proportioning rate through all types of proportioning equipment. **National Foam's Training Foam IS NOT designed to be used in the extinguishment of fire.**

Applications

Training Foam may be used through Class A or B foam proportioning systems. It has been designed to provide expansion characteristics similar to AFFF firefighting foams, but does not contain chemical components for firefighting performance. It is useful in testing foam evolution scenarios and proportioning equipment operation.

Training Foam may be used to demonstrate the expansion characteristics of various types of air aspirating and nonaspirating nozzles.

Technical Information

Training Foam uses the same synthetic foaming agents found in National Foam's AFFF concentrates. It is a pH balanced non-toxic concentrate that does not contain any fluorochemicals, polymers or solvents.

Compatibility

Training Foam should not be mixed, stored, or used with any other type of foam concentrate. Proportioning and application equipment should be flushed clean after use and before using different foam concentrate types.

Typical Physical Properties

Appearance	Clear Liquid
Specific Gravity @ 77°F(25°C)	1.01
pH	8.2
Viscosity @ 77°F(25°C)	1.03 csks
Freezing Point	23°F(-5°C)
Minimum Usable Temperature	35°F(2°C)
Maximum Usable Temperature	120°F(49°C)

Shelf Life

The shelf life of any foam concentrate is greatly affected by temperature changes, handling procedures, high or low temperatures and contamination by foreign materials. Proper storage and maintenance will help preserve the usable condition of the foam concentrate. Under optimum storage conditions, the storage life of Training Foam is expected to be similar to National Foam's AFFF concentrates. Consult National Foam for more specific questions regarding storage conditions and shelf life.

Storage and Handling

Training Foam concentrate may be stored in the original shipping container or in airtight tanks which have been designed for such storage. The ingredients used in Training Foam are subject to natural biodegradation which accelerates when the product is exposed to the air.

The best storage environment should be within the ecommended temperature range of 35°F to 120°F (2°C to 49°C).

Training Foam concentrate may be satisfactorily stored in other types of storage containers, provided the materials of construction are as follows:

1. Stainless steel (Type 304L or 316)
2. High density cross linked polyethylene
3. Reinforced fiberglass polyester (isophthalic polyester resin) with vinyl ester resin internal layer coating (50-100 mils).

Environmental and Toxicological Information

National Foam's Training Foam is formulated using surfactants derived from renewable resources such as corn and coconut or palm oils. The surfactants found in Training Foam can also be found in a wide variety of household, institutional, and industrial cleaning products. They are commonly employed in such products as fine-fabric detergents, dish washing liquids, laundry detergents, and carpet cleaners. Although the components were carefully selected for their non-toxic properties, as with the above mentioned products, prolonged exposure will dry the skin. As with most soaps or detergents, contact to the eyes should be avoided.

Training Foam concentrate or foam solution should not be discharged directly into waterways or biological sewage treatment systems, without prior approval. Due to their foaming capacity, training foam concentrate and solution may require further dilution before entering the waste water treatment plant. Please consult the facility operator prior to disposal. Disposal or discharge of Training Foam concentrate or foam solution should be made in accordance with federal, state and local regulations.

Biological and Chemical Oxygen Demand:
BOD_{20}. 51,000 mg/kg
COD 60,000 mg/kg

The BOD, subscript means that the value was measured over a 20 day period.

The BOD to COD ratio of a material, measured in mg/ kg, is used to rate the material's biodegradability. BOD (Biological Oxygen Demand) is a value that describes the amount of oxygen consumed by the decay of organic materials. The larger the BOD number, the higher the organic content. The COD (Chemical Oxygen Demand) value identifies the amount of dissolved oxygen required to effect complete breakdown of a chemical.

Ratios greater than 0.5 are generally considered acceptable for waste treatment systems. For example, 51,000 BOD ÷ 60,000 COD = 0.85. This rating is very good in terms of biodegradability. The closer this value is to 1, the better. It is important, however, that the facility operator know the quantity of material that will be entering the treatment system. The BOD and COD values indicated on this sheet are for raw foam concentrate. Since it is not likely that raw concentrate will be sent directly to a treatment facility, the BOD and COD of solution can also be calculated. As the concentrate is diluted (proportioned with water), the BOD and COD values are reduced by approximately the same percentage of dilution. For example, a concentrate with a BOD of 51,000 diluted for 3% use will result in a solution that has a BOD of approximately 1530 (51,000 x.03). The more diluted the material, the easier it is to treat at the facility.

Ordering Information

CONTAINER	SHIPPING WEIGHT	PART NUMBER
5-Gallon Pails		
(19 litres)	51 lbs. (23.2 kg)	1160-4340-6
55-Gallon Drums		
(208 litres)	554 lbs. (251.8 kg)	1160-4481-6
275-Gallon IBC Reusable Tote Tank		
(1041 litres)	2434 lb. (1106 kg)	1160-4725-6
Bulk	8.33 lbs./gal.(1.00 kg/l)	1160-4001-6

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. (1.1061 cu. m)

07/01 (Rev B) Printed in USA (NFC710-TRN-F.P65)

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