NATIONAL FOAM

ASSURANCE
NATIONAL FOAM

Muni^{F3} Green 3%

Synthetic Fluorine Free Foam

Synthetic

NFC512

- Superior 3% synthetic fluorine free foam formulated to extinguish hydrocarbon fires
- Specifically designed for the Municipal firefighter
- UL/ULC Listed
- Formulated without intentionally added (PFAS), (PFOA), fluorosurfactants, fluoropolymers or organohalogens
- Low viscosity to ensure easy induction
- 100% Biodegradable
- Formulated avoiding regrettable chemical substitutes such as chlorines, and siloxanes
- Can be used on structural fires, Class A and B fires
- Can be used as a wetting agent at 0.5% - 1.0%

GREENSCREEN CERTIFIED SILVER FIREFIGHTING FOAM 2.1 20211138 cpa

Muni^{F3} Green 3% is a superior quality synthetic fluorine free foam concentrate, designed for municipal firefighters on Class A and B hydrocarbon fires.

Muni^{F3} Green 3% is formulated to produce a vapor sealing blanket of foam that rapidly spreads over the surface of the fuel to provide rapid control and extinguishment.

- Unique patented formulation only available from National Foam.
- Fluorine free – can be used where traditional fluorinated products cannot be used.

Standards and Approvals

- Underwriters Laboratories, Inc.
- Underwriters Laboratories of Canada.
- NFPA 11

Applications

Muni^{F3} Green 3% is used in municipal fire risk situations where hydrocarbon fuels (such as oils, gasoline, diesel fuel, and aviation kerosene) are stored or transported.

Muni^{F3} Green 3% can also be used as a wetting agent in combating structural fires and fires in Class A materials such as wood, paper, and tires at a concentration of 0.5%-1.0%.

Muni^{F3} Green 3% provides a vapor suppressing foam blanket on unignited hydrocarbon spills, exhibiting long drainage times.

Typical Physical Properties

Appearance	Off White
Specific Gravity at 68°F(20°C)	1.01
pH @ 68°F(20°C)	7.5
Viscosity@ 68°F(20°C)	<2000 cP*
Expansion Ratio	5:1**
25% Drainage Time	>30 minutes**
Lowest Use Temperature	35°F(2°C)
Max Continuous Storage Temperature	120°F(49°C)

**Brookfield #4 Spindle @ 60 rpm. Viscosity measured under different shear conditions will vary because of pseudoplastic rheology of this non-Newtonian product.*

***Expansion ratio and 25% drainage time are typical values and are affected by accuracy of the foam proportioning device, the type of foam-making device, operating parameters, water quality and type, and atmospheric conditions.*

Equipment

Muni^{F3} Green 3% is intended for use at 3% (3 parts concentrate to 97 parts of water) on hydrocarbons. Muni^{F3} Green 3% is readily proportioned using conventional foam proportioning equipment such as portable and fixed (in-line) foam venturi proportioners, handline nozzles with pick-up tubes, around-the-pump proportioners, and on-board A/B proportioners.

Muni^{F3} Green 3% should be used with air aspirating discharge devices. Devices include low expansion nozzles, monitors and fixed foam discharge devices.

Muni^{F3} Green 3%

Synthetic Fluorine Free Foam

Compatibility

Muni^{F3} Green 3% is suitable for use in combination with:

- Potable or fresh water
- Expanded protein based or synthetic foams for application to a fire in sequence or simultaneously

Muni^{F3} Green 3% should not be mixed with any other type of foam concentrate in long or short 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.

Environmental

Muni^{F3} Green 3% has no intentionally added PFAS. Muni^{F3} Green 3% is 100% biodegradable and is manufactured without any intentionally added fluorinated surfactants, fluorinated polymers, organo-halogens or siloxanes .

Muni^{F3} Green 3% is biodegradable, however, as with any substance, care should be taken to prevent discharge from entering groundwater, surface water, or storm drains. Disposal of Muni^{F3} Green 3% should be made in accordance with federal, state, and local regulations.

Storage

Muni^{F3} Green 3% is ideally 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).

Foam concentrates are subject to evaporation which accelerates when the product is exposed to air. Storage tanks should be kept full, sealed and fitted with a pressure vacuum vent to prevent free exchange of air. The recommended storage environment is within the temperature range of 35°F to 120°F (2°C to 49°C). Foam Seal Balls (hollow plastic spheres), 1-1/2" diameter, floated on top of atmospheric tanks in (2) layers, can be used to slow evaporation. (Refer to NF data sheet NFC940 for additional information)

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. National Foam firefighting foam concentrates have been tested and have not shown significant loss of performance even after 10 years or more, provided annual testing and proper storage recommendations are followed. Refer to National Foam technical bulletin NFTB240 for recommendations on foam concentrate storage and preservation.

Annual testing of all firefighting foam is recommended by the National Fire Protection Association (NFPA). National Foam provides a Technical Service Program to conduct such tests. Refer to National Foam product data sheet NFC960 for further details on Technical Service program.

Ordering Information

Container	Shipping Weight	Shipping Dimensions	Part Number
5-Gallon Pails (19 liters)	44.1 lb. (20.0 kg)	1.13 cu. ft.^{3} (0.032 cu. m)	2199-3340-0
55-Gallon Drums (208 liters)	492 lb. (223.0 kg)	11.1 cu. ft.^{3} (0.314 cu. m)	2199-3481-0
275-Gallon IBC Reusable Tote Tank (1041 liters)	2494 lb. (1131.0 kg)	48.2 cu. ft.^{3} (1.365 cu. m)	2199-3725-0
330-Gallon IBC Reusable Tote Tank (1249 liters)	2990 lb. (1356.3 kg)	55.8 cu. ft.^{3} (1.580 cu. m)	2199-3733-0

National Foam
350 East Union Street, West Chester, PA 19382, USA
Email: info@nationalfoam.com
www.nationalfoam.com

08/24 NFC512 (Rev F)