



# ThunderStorm® WFFF

## Wildland

## Firefighting Foam



### Technical Information

#### Description

ThunderStorm® **FireStorm** WFFF Wildland Firefighting Foam is a non-corrosive, non-toxic, biodegradable Class A foam concentrate. When mixed with water in the correct proportion, it changes the properties of water. It reduces the surface tension of the water, and produces foam, which allows the water to cling to vertical or horizontal surfaces without run off. This allows the water to absorb more heat and provides greater penetration into Class A fuels.

#### Features

- **FULLY QUALIFIED** by the U.S.D.A. Forest Service as a Class AVfoam concentrate under U.S.D.A. Forest Service Specification #5100-307
- **FULLY QUALIFIED** within Canada for CL215 and CL415 Fixed-Wing Air Tankers
- Fully qualified for Fixed-Tank Helicopter
- U.L. Classified as a Wetting Agent, when used in accordance with NFPA 18.
- Reduces water consumption by 3 to 5 times
- Can be used with either fresh or salt water
- Suitable with non-air-aspirating or aspirating handline nozzles
- Suitable for use in Helicopter Bambi bucket, Compressed Air Foam Systems(CAFS)
- Suitable for use on rubber (tires), coal, paper and many other types of Class "A" fuels
- Suitable for use through medium expansion nozzles on Class "A" or contained Class "B" flammable liquids
- Suitable for use with high expansion foam generators
- Does not contain reportable components under SARA Title III/ Section 313.F/40 CFR-372 or CERCLA
- May be premixed for use as a foaming agent or for use as a wetting agent..

#### Performance Standards

The Forest Service Standard tests the agent at dilution rates of 0.1% to 1.0% for use on Class A fuels. First Class combines excellent wetting characteristics with great foam formation for superior effectiveness on Class A fires. Use in ground trucks, CAFS Systems, helicopter and fixed wing aircraft with buckets, scooper, and tanks. Contains no hazardous materials.

NFPA 18 provides for performance testing on Class A fuels as well as class B fuels. First Class has been tested at 0.5% as a wetting agent.

#### Foam Properties

Finished foam characteristics are dictated by the type of discharge device, flow rate, discharge pressure, and amount of foam concentrate in the water.

#### Proportioning Rates

##### When Used as a Foam Concentrate:

- Helicopter Bambi Bucket .05% - 0.7%
- Handline, air-aspirating nozzle .3% - .5%
- Handline, non-air-aspirating nozzle .3% - .6%
- Compressed air foam system 0.1% - 1.0%

##### When Used as a Wetting Agent:

- 0.5%

*Note: The above rates vary depending on the quality of the foam blanket required.*

#### Proportioning When Used as a Foam Concentrate

- Hypro Corporation Proportioning Systems
- Model 500 Foam Proportioner
- Balanced Pressure Pump Systems
- In-line Eductor
- Around the Pump Proportioners

#### Typical Properties at 77°F / 25°C

Appearance	Pale Amber Liquid
Specific Gravity	1.010
Surface Tension at:	1% Solution is 26.99nDynes/cm

#### Storage/Shelf Life

If kept in the original unopened and airtight factory supplied container and stored within the temperature range of 35°F-120°F, a shelf life of between 20-25 years can be expected. When stored in other than the original supplied container, check with Williams Fire and Hazard Control for storage guidelines. If frozen during storage, thawing will render the product completely serviceable.

*Note: It is not recommended to pre-mix Class A concentrate with water for long-term storage.*

#### Environmental Impact

WFFF is biodegradable, low in toxicity and can be treated in sewage treatment plants.

#### Ordering Information

5-gallon pail	Part No. WFFFFP
55-gallon drum	Part No. WFFFFD
265-gallon tote	Part No. WFFF265T
Bulk Delivery	Part No. WFFFG

#### Shipping Weight

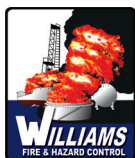
5-gallon (19 Liters) pail	Part No. WFFFFP
55-gallon (208 Liter) drum	Part No. WFFFFD
265-gallon (1000 Liter) tote	Part No. WFFF265T

#### Important Notice to Purchaser

All statements, technical information and recommendations contained herein are based on tests conducted with WFFF approved equipment, and are believed to be reliable. But the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose:



Sellers and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection there within. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL, OR COINCIDENTAL, ARISING OUT OF THE USE OF OR THE INABILITY TO USE THE PRODUCT. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.



Williams Fire & Hazard Control, Inc.  
Mauriceville, Texas, USA 77626  
P.O. Box 1359  
24 Hour Emergency Number — 409 -727-2347