ANSULITE AFC3B-FP29
3% Freeze-Protected AFFF Concentrate

Description
ANSULITE AFC3B-FP29 3% Freeze-Protected AFFF (Aqueous Film-Forming Foam) Concentrate combines fluoro- and hydrocarbon-surfactant technologies to provide superior fire and vapor suppression for Class B hydrocarbon fuel fires. This synthetic foam concentrate is intended for firefighting applications at 3% solution in fresh, salt, or hard water.

ANSULITE AFC3B-FP29 foam solution utilizes three suppression mechanisms for rapid fire knockdown and superior burnback resistance:
- The foam blanket blocks oxygen supply to the fuel.
- Liquid drains from the foam blanket and forms an aqueous film that suppresses fuel vapor and seals the fuel surface.
- The water content of the foam solution produces a cooling effect for additional fire suppression.

TYPICAL PHYSIOCHEMICAL PROPERTIES AT 77 °F (25 °C)
- Appearance: Clear amber liquid
- Density: 1.05 ± 0.02 g/ml
- pH: 7.0 – 8.5
- Refractive Index: 1.3850 minimum
- Viscosity*: 5 ± 1 cSt
- Spreading Coefficient: 3 dynes/cm minimum at 3% dilution
- Pour Point: –31 °F (–35 °C)
- Freeze Point: –33 °F (–36 °C)

*Cannon-Fenske viscometer at 77 °F (25 °C)

The ANSULITE AFC3B-FP29 Concentrate formulation contains short-chain, C-6 fluorochemicals manufactured using a telomer-based process that does not produce PFOS.

Approvals, Listings, and Standards
ANSULITE AFC3B-FP29 3% Freeze-Protected AFFF Concentrate is designed in accordance with National Fire Protection Association (NFPA) Standard 11 for Low-, Medium-, and High-Expansion Foam. The concentrate is approved, listed, qualified under, or meets the requirements of the following specifications and standards:
- UL Standard 162, Foam Liquid Concentrates
- ULC S564, Category 1 Foam Liquid Concentrates
- ICAO – Level B

Application
ANSULITE AFC3B-FP29 3% Freeze-Protected AFFF Concentrate is intended for use on Class B hydrocarbon fuel fires with low water solubility, such as crude oils, gasolines, diesel fuels, and aviation fuels. It is not suitable for use on polar fuels with appreciable water solubility, such as methyl and ethyl alcohol, acetone, and methyl ethyl ketone. It may also be used in conjunction with dry chemical agents to provide even greater fire suppression performance.

ANSULITE AFC3B-FP29 Concentrate can be ideal for fixed, semi-fixed, and emergency response firefighting applications such as:
- Fuel or chemical storage tanks
- Industrial chemical and petroleum processing facilities
- Truck/rail loading and unloading facilities
- Flammable liquid containment areas
- Docks and on-board marine systems
- Mobile equipment
Storage and Handling

ANSULITE AFC3B-FP29 3% Freeze-Protected AFFF Concentrate should be stored in the original supplied package (HDPE totes, drums, or pails) or in the recommended foam system equipment as outlined in Johnson Controls Technical Bulletin Storage of Foam Concentrates. The product should be maintained within the recommended temperature range. If the concentrate freezes during transport or storage, full product serviceability can be restored upon thaw with gentle re-mixing.

Factors affecting foam concentrate’s long-term effectiveness include temperature exposure and cycling, storage container characteristics, air exposure, evaporation, dilution, and contamination. The effective life of ANSULITE AFC3B-FP29 Concentrate can be maximized through optimal storage conditions and proper handling. ANSULITE concentrates have demonstrated effective firefighting performance with contents stored in the original package under proper conditions for more than 10 years.

Mixing ANSULITE AFC3B-FP29 Concentrate with other foam concentrates for long-term storage is not recommended. Use in conjunction with comparable 3% AFFF products for immediate incident response is appropriate.

Proportioning

The recommended operational temperature range for ANSULITE AFC3B-FP29 3% Freeze-Protected AFFF Concentrate is -20 °F to 120 °F (-29 °C to 49 °C) per UL-162. However, the diluted solution will freeze at 32 °F (0 °C). This foam concentrate 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
- Handline nozzles with fixed eductor/pick-up tubes

For immediate use: The concentrate may be diluted with fresh or sea water to a 3% pre-mix solution.

For delayed use: Consult Technical Services for guidance regarding suitability of a stored pre-mix solution (fresh water only).

Materials of Construction Compatibility

To help avoid corrosion, galvanized pipe and fittings should never be in contact with undiluted ANSULITE AFC3B-FP29 3% Freeze-Protected AFFF Concentrate. Refer to Johnson Controls Technical Bulletin Acceptable Materials of Construction for recommendations and guidance regarding compatibility of foam concentrate with common materials of construction in the firefighting foam industry.