



ANGUS FIRE



Niagara^{®C6} 1-3

Alcohol Resistant
Film-Forming Fluoroprotein
Foam



Integrity

Doing what's right, rather than what's convenient

Angus Fire prides itself on the open and honest way in which we conduct our business throughout the world. Our foams are an extension of our ethical beliefs and we pride ourselves in being the responsible foam manufacturer, balancing high performance with minimal environmental impact.

C6 Technology

Niagara^{®C6} 1-3 alcohol-resistant film forming fluoroprotein foam (AR-FFFP) is used at 1% and 3% concentration to extinguish both hydrocarbon and polar-solvent (water miscible) fires. The C6 Fluorosurfactants have been developed and refined specifically to lower the environmental impact without reducing performance. This new formulation demonstrates Angus Fire's commitment to superior flexibility, firefighting performance, and environmental responsibility. It is suitable for use with foam compatible dry powder extinguishing agents.



- ✔ Easy pouring and induction.
- ✔ Highly versatile.
- ✔ Suitable for use with fresh or sea water.
- ✔ Detergent free for high resistance to fuel pickup.
- ✔ Used at 1% concentration on hydrocarbons and 3% on polar solvent (water miscible) fires.
- ✔ Suitable for use with foam compatible dry powder extinguishing agents.
- ✔ Underwriters Laboratories, Inc.
- ✔ Underwriters Laboratories of Canada.

Niagara^{®C6} 1-3 is a superior quality alcohol resistant film-forming fluoroprotein (AR-FFFP) firefighting foam concentrate for extinguishing and securing a broad range of Class B flammable liquid fires.

Niagara^{®C6} 1-3 does not contain any polymers that cause conventional alcohol resistant type foam concentrates to be viscous. It is therefore easy to pour from the drum when used with portable foam equipment. High fluidity means that proportioning is quick, easy and accurate with both portable inductors and fixed balanced pressure proportioners.

Niagara^{®C6} 1-3 is based on a natural protein foaming agent and contains no harmful synthetic detergent or glycol ether.

Niagara^{®C6} 1-3 at 1% is the ideal firefighting foam to use in high risk situations where hydrocarbons (such as aviation kerosene, crude oil, gasoline and diesel fuel) are stored, processed, or transported. Niagara^{®C6} 1-3 is recommended for use at 3% on polar solvents such as alcohols, ketones, esters and ethers.

Niagara^{®C6} 1-3 is readily proportioned using conventional foam proportioning equipment. Niagara^{®C6} 1-3 can be used with non-aspirated discharge devices such as spray nozzles, monitors and conventional sprinklers for use on shallow spill fires of hydrocarbons only. Non-aspirated application is not recommended as the primary method of attack for major fires where a stable foam cover is essential. Air-aspirating discharge devices such as low expansion nozzles, monitors, foam makers and foam chambers are all suitable for use with use Niagara^{®C6} 1-3.

Typical Physical Properties

Appearance.....	Dark Brown Liquid
Specific Gravity at 77°F(25°C).....	1.16
pH.....	7.2
Viscosity @ 68°F (20°C).....	18 cST
Min Usable Temperature.....	0°F(-18°C)
Max Usable Temperature.....	120°F(49°C)

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Storage and Handling

Niagara^{®C6} 1-3 is ideally stored in its original shipping container or in tanks or other containers that have been designed for such foam storage. Recommended construction materials are carbon steel, 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 sealed and fitted with a pressure vacuum vent to prevent free exchange of air. The recommended storage environment is within the UL-listed temperature range of 0°F to 120°F (-18°C to 49°C). When product is stored in atmospheric storage tanks, contents must be covered with 1/4-inch (6.35mm) of Angus Fire Seal Oil to ensure prevention of air coming into contact with the foam concentrate. Use of Seal Oil is only recommended in stationary storage tanks. Refer to Angus Fire product data sheet AFC700 for further information.

It is recommended that Niagara^{®C6} 1-3 not be mixed with any other type of foam concentrate in long-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.

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.

Annual testing of all firefighting foams is recommended by the National Fire Protection Association (NFPA). National Foam provides a Technical Service Program to conduct such tests. Refer to Angus Fire product data sheet AFC400 for further details on Technical Service Program, or contact your Angus Fire representative.

Environmental and Toxicological Information

Angus Fire Concentrates do not contain PFOS in accordance with USEPA Stewardship Program 2010/2015.

Prevent foam concentrate or foam solution from entering ground water, surface water, or storm drains. Discharge and disposal of Niagara^{®C6} 1-3 concentrate or foam solution should be made in accordance with federal, state, and local regulations.

Niagara^{®C6} 1-3 has not been tested for acute oral toxicity, primary eye, or primary skin irritation. Repeated skin contact will remove oils from the skin and cause dryness. Niagara^{®C6} 1-3 is a primary eye irritant, and contact with the eyes should be avoided. Users are advised to wear protective equipment. If Niagara^{®C6} 1-3 enters the eyes, flush them well with water and seek immediate medical attention. For further details, see the Niagara^{®C6} 1-3 Safety Data Sheet AMS185.

ORDERING INFORMATION

Container	Shipping Weight	Shipping Dimensions	Part Number
5-Gallon Pails (19 liters)	50.7 lb. (23 kg)	1.13 cu. ft. ³ (0.032 cu. m)	3111-6340-4
55-Gallon Drums (208 liters)	551 lb. (250 kg)	11.1 cu. ft. ³ (0.314 cu. m)	3111-6481-4
265-Gallon IBC Reusable Tote Tank (1000 liters)	2712 lb. (1230 kg)	48.2 cu. ft. ³ (1.365 cu. m)	3111-6625-4



EMERGENCY FOAM SERVICE Call +1 610-363-1400 – 24 hours a day, every day