



Niagara^{C6} 3-3

Alcohol Resistant Film-Forming FluoroProtein (AR-FFFP) Foam Concentrate

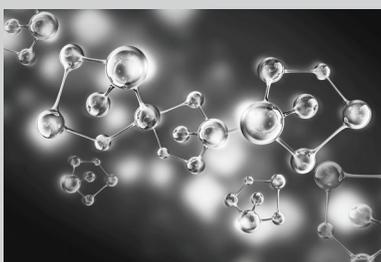
Integrity

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. Our C6 foams contain no PFOA and no PFOS, in accordance with US EPA Stewardship Programme 2010/15 and EU Directive 2006/122/EC and amended Council Directive 76/769/EEC.

C6 Fluorosurfactants

These are the most effective agents currently available to tackle serious flammable liquid fires, providing firefighter safety and asset protection. Angus foams containing C6 surfactants utilise the very latest in firefighting foam technologies, developed and refined specifically to lower the environmental impact without reducing performance.



- Easy pouring and induction
- Extremely low environmental impact
- Highly versatile
- Film-forming foam with fast knockdown

Niagara^{C6} 3-3 is a superior quality Alcohol Resistant Film-Forming FluoroProtein (AR-FFFP) fire fighting foam concentrate at 3% induction rate for extinguishing and securing both flammable hydrocarbon and polar solvent liquid fires.

Benefits

- Highly versatile - eliminates need to stock a variety of foam types
- Detergent-free for high resistance to fuel pick-up
- Foam blanket re-seals when disrupted by personnel or equipment

Easy pouring and induction

Niagara^{C6} 3-3 does not contain any polymers that cause conventional AR type 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.

Environment

Niagara^{C6} 3-3 is based on a natural protein foaming agent and contains no harmful synthetic detergents, glycol ethers, alkyl phenol ethoxylates (APEs), tolyltriazoles, or complexing agents.

Applications

Ideal for use in high-risk applications where polar solvents (such as alcohols, ketones, and ethers) and/or hydrocarbons (such as crude oil, gasoline, diesel fuel, aviation kerosene) are stored, processed or transported.

Approvals and Listings

Niagara^{C6} 3-3 has numerous approvals and UL Listings against Underwriters Laboratories Standard UL 162 (7th Edition).

Independently Tested and Certified to EN1568:2008 Part 3.

Equipment

Intended for multipurpose use at 3% (3 parts concentrate to 97 parts water) on hydrocarbons & polar solvents.

Proportioning

Readily proportioned at 3% using conventional foam proportioning equipment such as portable and fixed foam proportioners. Newtonian fluid characteristics for easy pouring from drums over a wide range of temperatures.

Non-aspirated

Non-aspirated application is not recommended as the primary method of attack for major fires where a stable foam cover is essential. However, Niagara^{C6} 3-3 can be used with non-aspirating discharge devices such as spray nozzles, monitors, and conventional sprinklers for use on shallow spill fires of hydrocarbons only.

Niagara^{C6} 3-3

Alcohol Resistant Film-Forming FluoroProtein (AR-FFFP) Foam Concentrate

Low expansion

Air aspirating discharge devices such as low expansion branchpipes, monitors, top pourer sets, MEX Bund Pourers and foam/water sprinklers are all suitable for use with Niagara's exceptional resistance to fuel contamination enables it to withstand vigorous mixing with hydrocarbon fuels.

This makes it suitable for forceful application onto large hydrocarbon storage tank fires from ground-based mobile monitors or via sub-surface injection systems.

Compatibility

Suitable for use in combination with:

- Soft, hard, brackish and saline water.
- Dry powder extinguishing agents either separately or in twin agent systems.
- Expanded foams (either protein or synthetic based) for application simultaneously or sequentially to a fire.

Disposal

For fire water runoff and accidental spillage please refer to Angus Fire's Foam Disposal Guide and MSDS for more information.

Reliability

Niagara^{C6} 3-3 is produced to rigorous quality control standards which ensure consistent fire performance and excellent product reliability.

Angus Fire operates a quality management system which complies with the requirements of BS EN ISO 9001.

Typical Physico-Chemical Properties

Appearance		Dark Brown Liquid
Specific gravity @ 20°C (68°F)		1.14 - 1.18
pH @ 20°C (68°F)		6.5 - 7.5
Viscosity @ 20°C (68°F)	mm ² sec ⁻¹	18
Maximum continuous storage temperature	°C (°F)	49 (120)
Maximum intermittent storage temperature	°C (°F)	60 (140)
Freezing point	°C (°F)	-18.5 (-0.4)
Effect of freeze/thaw		No loss of performance
UL Lowest use temperature	°C (°F)	-17.8 (0)

Typical Foam Properties

Foam generated using the U.K. Defence Standard DEF42-40 5 lpm branchpipe at 7 Bar pressure. Foam collected in a 1630 ml N.F.P.A. drainage pan.

Expansion ratio		≥ 8
25% drainage time minutes	min/sec	≥ 3' 30"

Packing Specification

	Plastic Square	Plastic Square	Plastic Cylindrical	Plastic Cylindrical	Ecobulk MX
Capacity	25 litres	5 US gallons	200 litres	55 US gallons	1000 litres
Empty weight (kg)	1.2	0.8	9.0	9.0	70
Filled weight (kg)	30	23	241	250	1230
Dimensions (mm)	448 x 286 x 286	402 x 293 x 240	580 D x 922 H	580 D x 922 H	1200 L x 1000 W x 1160 H
Part number	FN0720G0P	FN0720T0P	FN0720J0P	FN0720W0P	FN0720L8



**EN1568:2008
Parts 3 & 4**



EMERGENCY FOAM SERVICE Call +44 (0) 15242 61166 – 24 hours a day, every day

INTERNATIONAL SALES

Angus Fire Ltd

Angus House, Haddenham Business Park,
Pegasus Way, Haddenham, Aylesbury, HP17 8LB, UK
Tel: +44 (0)1844 293600 • Fax: +44 (0)1844 293664

UK SALES

Angus Fire Ltd

Station Road, Bentham, Lancaster, LA2 7NA, UK
Tel: +44 (0)1524 264000 • Fax: +44 (0)1524 261580

Angus Fire operates a continuous programme of product development. The right is therefore reserved to modify any specification without prior notice and Angus Fire should be contacted to ensure that the current issues of all technical data sheets are used.

© Angus Fire 5234C6/4 09.17
Niagara® is a registered trademark of the Angus International group.