



Universal[®] CG^{C6} 6%

Alcohol Resistant Aqueous
Film-Forming Foam
NFC430



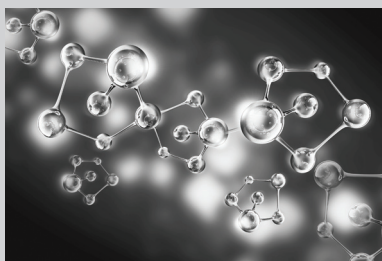
Assurance

Firefighting and environmental performance you can rely on

National Foam prides itself on the open and honest way in which we conduct our business throughout the world. Our foam concentrates 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

Environmentally responsible Universal CG^{C6} 6% alcohol-resistant aqueous film forming foam (AR-AFFF) is used at 6% 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 National Foam's commitment to superior flexibility, firefighting performance, and environmental responsibility. It is suitable for use with foam compatible dry powder extinguishing agents.



- ✔ Suitable for use with fresh or sea water.
- ✔ Used at 6% concentration on hydrocarbons and polar solvent (water miscible) fires
- ✔ Suitable for use with foam compatible dry powder extinguishing agents.
- ✔ Underwriters Laboratories, Inc.

Universal CG^{C6} 6% contains a biosynthesized polymer designed to fulfill two functions. The first is to form a protective membrane between the fuel and the foam as it contacts the water miscible fuel, making extinguishment possible. The second function is to make the foam more stable and heat-resistant, resulting in better burnback resistance and sealability compared to conventional AFFF's.

Applications

Universal CG^{C6} 6% is used in fire suppression systems and manual applications to fight the broadest range of Class B fires. Typical applications include hydrocarbon carriers, chemical carriers, RoRo vessels, firefighting tugs, etc.

Typical Physical Properties

Appearance.....Pale Yellow Viscous Liquid
 Specific Gravity at 77°F(25°C).....1.02
 pH.....8.1
 Viscosity.....3000 cP*
 Min Usable Temperature.....35°F(2°C)
 Max Usable 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.

Storage and Handling

Universal CG^{C6} 6% 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). Refer to National Foam Technical Bulletin NFB100 for further information.

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 35°F to 120°F (2°C to 49°C).

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Universal CG^{C6} 6% foam concentrate is freeze/thaw stable. Should the product freeze during shipment or storage, no performance loss is expected upon thawing.

It is recommended that Universal CG^{C6} 6% 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. Properly stored

National Foam AR-AFFF foam concentrates have been tested and shown no significant loss of firefighting performance, even after 15 years.

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 National Foam product data sheet NFC960 for further details on Technical Service Program, or contact your National Foam representative.

Environmental and Toxicological Information

National Foam Concentrates do not contain PFOS.

Prevent foam concentrate and foam solution from entering ground water, surface water, or storm drains. Discharge

and disposal of Universal CG^{C6} 6% concentrate or foam solution should be made in accordance with federal, state, and local regulations. Refer to National Foam Technical Bulletin NFTB110 for further information.

Universal CG^{C6} 6% has not been tested for acute oral toxicity, primary skin irritation or primary eye irritation. Repeated skin contact will remove oils from the skin and cause dryness. Universal CG-6% is a primary eye irritant, and contact with the eyes should be avoided. Users are advised to wear protective equipment. If Universal CG^{C6} 6% enters the eyes, flush them well with water and seek immediate medical attention. For further details, see the Universal CG^{C6} 6% Safety Data Sheet NMS430.

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Underwriters Laboratories-Listed Type II Application Rates for Universal CG^{C6} 6%

<u>Fuel Group</u>	<u>Proportioning %</u>	<u>Application Rate gpm/ft² (lpm/m²)</u>
Alcohols	6%	0.24 (9.8)
Ketones	6%	0.24 (9.8)
MTBE	6%	0.24 (9.8)
Ethers	6%	0.16 (6.5)
Hydrocarbons	6%	0.16 (6.5)
Ethers	6%	0.24 (9.8)
Aldehydes	6%	0.35 (14.3)
Acids	6%	0.24 (9.8)
Amines	6%	0.24 (9.8)

Ordering Information

Container	Shipping Weight	Shipping Dimensions	Part Number
5-Gallon Pails (19 liters)	45 lb. (20.4 kg)	1.13 cu. ft.3 (0.032 cu. m)	1130-1340-4
55-Gallon Drums (208 liters)	490 lb. (222.3 kg)	11.1 cu. ft.3 (0.314 cu. m)	1130-1481-4
275-Gallon IBC Reusable Tote Tank (1041 liters)	2472 lb. (1121.3 kg)	48.2 cu. ft.3 (1.365 cu. m)	1130-1725-4
330-Gallon IBC Reusable Tote Tank (1249 liters)	2960 lb. (1342.7 kg)	55.8 cu. ft.3 (1.580 cu. m)	1130-1033-4
Bulk	8.5 lb./gal. (1.02 kg/l)		1130-1001-4

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

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03/17 NFC430 (Rev H)