CHEMGUARD® CTF1 Training Foam Concentrate

Description

CHEMGUARD® CTF1 training foam concentrate is intended to simulate firefighting foam concentrates for training purposes. It is **not** effective **or intended for use** in actual firefighting response.

This training foam has been formulated to replicate firefighting foams via conventional proportioning and discharge devices. The training foam expansion ratios and drain times are similar to firefighting foam concentrates. During fire training, the foam does not produce a sealing film on the fuel surface and this allows for repeated training exercises and a more challenging training environment. Users should work with the Authority Having Jurisdiction to evaluate the risks and requirements of using training foam for live fire exercises.

CHEMGUARD CTF1 foam provides the firefighter with a foam application experience similar to that of an actual firefighting foam in terms of foam volume and blanket robustness. It provides for realistic operational training in equipment set up, application techniques, and foam containment. It also allows users to assess relative foam quality and range for various types of discharge devices at different operating pressures.

CHEMGUARD CTF1 foam concentrate may be safely handled in a training environment with appropriate personal protection equipment. Consult the Authority Having Jurisdiction regarding use, storage, and disposal of CHEMGUARD CTF1 foam concentrate or solution. Disposal methods should be in accordance with applicable regional, national, and local laws and regulations.

TYPICAL PHYSIOCHEMICAL PROPERTIES AT 77 °F (25 °C)

Appearance	Clear yellow liquid
Density	1.01 ± 0.01 g/ml
pH	7.0 – 8.0
Storage and Operating Range	32 °F to 120 °F (0 °C to 49 °C)

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Features

- Formulated for training to simulate firefighting foams
- Economical and best practice option for fire training and discharge testing

Foaming Properties

CHEMGUARD CTF1 training foam concentrate may be applied using most conventional foam discharge equipment as well as some specialized discharge equipment such as Compressed Air Foam Systems (CAFS). The concentrate may be mixed with fresh, salt, or hard water. Water hardness below 500 ppm (expressed as calcium and magnesium) is recommended for optimum foam generation.

CHEMGUARD CTF1 foam concentrate requires low energy to foam, and the foam solution may be applied with aspirating and non-aspirating discharge devices. Non-aspirating devices - such as handline nozzles or water fog/stream nozzles - typically produce expansion ratios from 2:1 to 4:1. Aspirating low-expansion discharge devices typically produce expansion ratios from 3.5:1 to 10:1, depending on the type of device and the flow rate. Medium-expansion discharge devices typically produce expansion ratios from 20:1 to 60:1.

This foam concentrate can be correctly proportioned over a range of dilutions (typically 1%) using most conventional, properly calibrated proportioning equipment.

TYPICAL FOAM CHARACTERISTICS

Proportioning Rate	1%	3%	6%
Expansion Ratio	≥ 8.0	≥ 9.0	≥ 10.0
25% Drain Time (min:sec)	≥ 2:00	≥ 3:00	≥ 3:00
50% Drain Time (min:sec)	≥ 4:00	≥ 4:00	≥ 4:30

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Storage and Handling

CHEMGUARD CTF1 training foam 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 concentrate is for training purposes only and should not be stored in any active firefighting equipment or system.

The product should be maintained within the recommended operational temperature range of 35 °F to 120 °F (2 °C to 49 °C). If the concentrate freezes during transport or storage, full product serviceability can be restored upon thaw with gentle re-mixing.

Factors affecting the foam concentrate's long-term effectiveness include temperature exposure and cycling, storage container characteristics, air exposure, evaporation, dilution, and contamination. The effective life of CHEMGUARD CTF1 foam concentrate can be maximized through optimal storage conditions and proper handling. Containers should be kept tightly closed until use to prevent evaporation and to minimize any contamination that might promote natural biodegradation.

CHEMGUARD CTF1 foam concentrate SHOULD NOT be mixed, stored, or used with any other type of foam concentrate. Proportioning and application equipment should be flushed clean after training exercise and before equipment is returned to firefighting service.

Materials of Construction Compatibility

Refer to Johnson Controls Technical Bulletin Acceptable Materials of Construction for recommendations and guidance regarding compatibility of CHEMGUARD CTF1 training foam concentrate with common materials of construction in the firefighting foam industry.

Ordering Information

CHEMGUARD CTF1 training foam concentrate is available in pails, drums, totes, or bulk shipment.

Part No.	Description	Shipping Weight
Pails		
704652	5 gal (19 L)	45 lb (20.4 kg)
Drums		
704653	55 gal (208 L)	495 lb (224.5 kg)
Totes		
704654	265 gal (1,003 L)	2,465 lb (1,118 kg)

For bulk orders, consult an account representative.

Safety Data Sheets (SDS) are available at www.chemguard.com

Note: While NFF (also known as AR-SFFF) agents may be compatible with existing AFFF and/or NFF hardware, system contamination from fluorinated agents may exist if hardware and piping is not replaced upon conversion to non-fluorinated agents.

Note: The converted values in this document are provided for dimensional reference only and do not reflect an actual measurement.