

HOTFOAM™ 2% Foam Concentrate

Description

HOTFOAM concentrate is a fully synthetic foam compound developed to meet the requirements of high expansion systems using the inside air technique. It is suitable for applications where high quality, top performing foam concentrate is required and is intended for use as a 2% proportioned solution.

HOTFOAM concentrate forms a stable foam when expanded by extremely hot and aggressive combustion gases. Traditional high expansion foams and detergent foams often see expansion reduce by a half, or more. This drastically affects foam performance in a high expansion system.

Features

- 2% high expansion foam
- Designed for inside air application
- EN 1568, ISO 7203, and IMO approved
- Suitable for use with fresh, salt, or hard water
- Supplied ready to use in 20 L, 200 L and 1000 L packaging

Performance

HOTFOAM 2% foam concentrate is mostly used for inside air foam systems in enclosed spaces. HOTFOAM is suitable for a number of applications, such as:

- Warehouses
- Flammable liquid storage protection
- Tunnel facilities
- Marine engine and pump rooms
- Traditional outside air high expansion systems

HOTFOAM forms high expansion foam using inside air, including combustion gases. Expansion ratios through the HOTFOAM generators are typically between 600:1 and 700:1. The foam fills the protected space, suppresses the fire within it and prevents re-ignition. It can be used with fresh, sea or brackish water.

HOTFOAM is measured against international standards and specifications, including EN 1568 and IMO. Inside air HOTFOAM performance is verified against many tests and protocols, including IMO 1384. Testing includes performance evaluations on temperatures up to 1000°C.

HOTFOAM is successfully tested on high expansion applications on either solid Class A materials such as wood or plastics as well as conventional Class B hydrocarbon fuels such as gasoline, diesel fuel and jet fuels. High expansion suppression capabilities are verified on polar solvents, such as ethanol.



Application

HOTFOAM can be used with conventional foam proportioning equipment such as:

- PP and PPW pressure pump proportioning equipment
- MTB bladder tank and related TP and TPW proportioners
- Fixed in-line venturi type MI inductor
- Around-the-pump type PI proportioners

Approvals

The fire performance of HOTFOAM has extended listings and approvals to comply with or to meet the requirements of the following specifications and standards:

- EN 1568: 2008 Part 2
- ISO 7203 Part 2
- IMO Msc 670
- IMO Msc 1384 inside air test
- MED B







Storage and Shelf Life

HOTFOAM has an operational temperature range of -2°C to 50°C. Limited exposure to temperatures above 50°C does not affect its fire fighting performance. When stored in the polyethylene drums or cans supplied, or in equipment advised by the manufacturer as part of the foam system, and within the temperature limits specified, the shelf life of HOTFOAM concentrate is approximately 20 to 25 years. The factors affecting shelf life and stability for SKUM foam agents and storage procedures are available in Technical Bulletin 11A.

HOTFOAM can have a small colour change over time, depending on the aging of the product. The colour can be pale yellow to amber. The colour change does not impact the performance of the foam.

Safety and Handling

See the corresponding Material Safety Data Sheet available at www.skum.com.

Miscibility

The miscibility of HOTFOAM is tested with previous generation concentrates such as Meteor V, P and P+.

Materials of Construction Compatibility

HOTFOAM concentrate is verified as compatible with the following storage tank materials:

- Coated carbon steel tanks
- GRP or other plastics
- Stainless steel
- Bladder tanks containing rubber bladders

Refer to Technical Bulletin 13A which addresses acceptable materials of construction for use with SKUM foam concentrates. Alternatively, contact Johnson Controls Technical Services.

Quality Assurance

HOTFOAM is subject to stringent quality controls throughout all stages of production, from incoming raw ingredients to product completion. It is manufactured in an ISO 9001:2008 controlled facility to guarantee quality assurance. HOTFOAM does not contain any fluorosurfactant and is considered a fluorine free foam.

TYPICAL PHYSIOCHEMICAL PROPERTIES AT 20°C (68°F)

HOTFOAM Hi-Ex 2% Fire class A and B Admixing ratio volume 2%

Shape and colour Pale yellow to amber clear

liquid

Expansion Low, medium, and high

Density $1.02 \text{ g/ml} \pm 0.02$ Acidity $7.5 \text{ pH} \pm 0.5$ Viscosity $17.0 \pm 4.0 \text{ mm}^2\text{/s}$

Sediment EN 1568 \leq 0.1% Expansion ratio \geq 800

Drain time 25% ≥ 8:00 min:s

20°C, EN 1568-3

Drain time 50% ≥ 15:00 min:s

20°C, EN 1568-3

Pour point \leq -9°C Freeze point \leq -13°C Storage and -2°C to 50°C

usage temperature

Ordering Information

When ordering, specify the following information:

 Part Number
 Description
 Shipping Weight

 F202169C2
 20 L Can
 21.6 kg (47.9 lb)

 F202169D1
 200 L Drum
 212.5 kg (468.8 lb)

 F202169T1
 1000 L Tote
 1080.0 kg (2380.2 lb)

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

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