



STHAMEX®-K 1% F-15 #9143



SYNTHETIC FOAM CONCENTRATE

STHAMEX®-K 1% F-15 penetrates faster than common firefighting foam agents into the surface of solid materials and thus achieves an excellent cooling and extinguishing effect. The high wetting and extinguishing effect is particularly effective in conjunction with foam generation by the CAFS process*¹.

STHAMEX®-K 1% F-15 is easily and completely biodegradable and free of organic fluorine compounds*², preservatives and silicone compounds.

Performance

STHAMEX®-K 1% F-15 is specifically designed for use with mobile foam generating equipment for Class A fires and Class B (non-polar) pool/spill fires, as well as for non-foam application as a wetting agent and for use as a CAFS*¹ foam.

It foams very well hence is excellent for the production of low - and medium expansion foam.

Low expansion foam made from STHAMEX®-K 1% F-15 provides a particularly fine-bubbled, compact and stable foam blanket that sticks well to solid surfaces cooling them and insulating them very effectively against radiant heat. The foam blanket slowly and evenly releases foam solution to the substrate and is thus able to very efficiently wet and penetrate deeply into solid (e.g. motor vehicles, Li-ion batteries, recycling materials, etc.) and ember-forming (e.g. wood, paper, tires, ...) materials.

Medium expansion foam produced from solutions of STHAMEX®-K 1% F-15 has a homogeneous bubble structure, flows well and is stable.

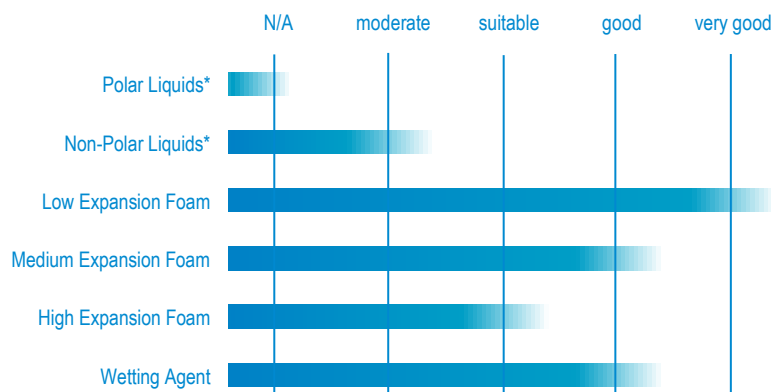
The robust formulation of STHAMEX®-K 1% F-15 grants a high level of redundancy in performance and stability against influences typical for situations of engagement.

Technical Specification

Appearance	colourless/yellow
Fire Class/-es	A + B
Lowest Use Temperature	-15 [°C]
Max. Storage Temperature	max. +50 [°C]
Specific Gravity (20°C)	1,010 ± 0,02 [g/ml]
pH value (20°C)	6,5 - 8,5
Viscosity (20°C)	< 30 [mm²/sec]
Sedimentation	Sediment Free

Foam Properties acc. to EN1568 at 20°C

Induction Rate	0,5% - 1%
Expansion Rate	6 - 10, 60 - 100
25% Drainage Time	2 - 6, 2 - 6 [min]
50% Drainage Time	4 - 8, 9 - 13 [min]
Expansion Types	Low -, Medium Expansion Foam



*as mentioned in the respective test standard or in the text

Performance Tests

DIN EN 1568 EN 1568:2008 - Approval-No.: KB-233/14
Part 3 (Heptane): IIC/IIC
Part 1: Medium Expansion Foam

DIN EN 3 27A

¹ CAFS: Compressed Air Foam System.

² We define fluorine-free as products that are manufactured without the intentional addition of fluoroorganic compounds for the purpose of improving performance in such a way that, according to currently commercially available analysis of PFAS in firefighting foam concentrates, they do not contain any quantity of fluoroorganic substances in excess of the ubiquitous regional background contamination (e.g. in the drinking water used for production).

Application

STHAMEX®-K 1% F-15 can be expanded to give low - and medium expansion foam with all commercially available foam generating systems and -equipment and used as extinguishing foam against fires of class A- and -B fires (e.g. fires of plastics and mineral oil products).

In addition to tap water, sea water, brackish water and treated industrial water (without foam-destroying additives) can also be used to generate foam. The low viscosity allows the use of commercially available proportioners and dosing equipment down to the lowest application temperature of The proportioning rate to the fire water is 0,5%.

STHAMEX®-K 1% F-15 can be applied indirectly as low - and medium expansion foam to fires of non-polar*³ liquids and forms a fine-bubble, extremely stable, vapor-tight foam blanket, which is very flowable and thus highly effective in extinguishing fires.

The firefighting foam agent significantly reduces the surface tension of water and for this reason is very well suited as a wetting agent for use on Class A fires. When used as a non-foaming wetting agent to extinguish hard-to-wet materials, the proportioning rate can be reduced to about one-tenth of the normal proportioning rate to fire water. For use as wetting agent standard branchpipes can be used.

For extinguishing operations in the presence of or on electrical equipment, relevant standards for protection against damage by electricity (e.g. in Germany DIN/VDE-0132) must be followed.

Compatibility

As a general rule, firefighting foam concentrates should not be mixed with each other. When mixing different firefighting foam agents, it must be considered that the resulting mixture is a new chemical product which is not tested as firefighting foam agent and also must be re-evaluated and labelled according to hazardous materials regulations.

STHAMEX®-K 1% F-15 must not be mixed with other firefighting foam concentrates, even when used immediately (e.g. in case of emergency).

The foam produced from STHAMEX®-K 1% F-15 is fully compatible with all other ready expanded firefighting foams.

Storage & Shelf Life

When synthetic firefighting foam agents and concentrates are stored, only certain materials in only certain combinations are suitable for permanent media contact. Our detailed Technical Information Nos. 014 (Storage of synthetic firefighting foam concentrates) and 009 (Material suitability polymers) provide information on this and other important aspects for the optimum storage of our products. Please do not hesitate to contact us for further information. On short-term contact and subsequent thorough cleaning with water, # or a premix solution made from it will not corrode metals such as copper, aluminium, brass, admiralty brass or bronze.

³ flammable liquids that are not miscible with water.

Elevated temperatures up to a maximum of +50°C or temporary freezing at temperatures below the specified frost resistance limit do not affect this high-quality product adversely (see our further Technical Information on the storage of firefighting foam agents). Temperature should not exceed +50°C.

Before filling storage tanks, these tanks and all supply lines, pumps, valves or other parts carrying media must be thoroughly cleaned, free of grease and free of residues from a previous filling. Before filling up stocks of our STHAMEX®-K 1% F-15 we recommend to have a quality test of the stock to be filled up carried out in our laboratory.

If stored according to our storage recommendations, a shelf life of well over ten years is possible.

Environment

STHAMEX®-K 1% F-15 is a liquid with the pseudoplastic properties of an alcohol-resistant firefighting foam agent concentrate for use as a replacement liquid especially for testing and commissioning systems with which viscous firefighting foam concentrates are conveyed or admixed.

After use, all parts which were in contact to STHAMEX®-K 1% F-15 must be thoroughly rinsed with water and cleaned to prevent any product buildup. Dried-in adhesions may require longer time soaking for removal.

We recommend to coordinate the discharge of the application solution into the sewage system in advance with the operator of the local wastewater treatment plant and/or the local authorities. Disposal must be carried out in consultation with local authorities and specialised waste treatment companies. Unused product (concentrate) must not be released into the environment.

Transport

STHAMEX®-K 1% F-15 is available in the following packaging units: PE-canister (20 ltr, 25 ltr and 60 ltr), PE-canister according to DIN 14452 (20 ltr); PE-drum (200 ltr), PE-IBC (600 ltr und 1.000 ltr) or bulk.

Please contact us for special packing sizes.



For further Documentation please scan the Qr code or see <http://sthamer.de/q/9143>



Safety Advice: Please bear in mind that foam solutions are electroconductive liquids. The use in proximity to electrical/electronic equipment can require specific safety measures.



Safety Advice: Please see our Technical Information regarding "Mixing of Foam Concentrates" for further information

Disclaimer:

Any information in this product data sheet bases upon our best knowledge and expertise at the time of this issue. We reserve the right to change the content of this document or adopt to newer information . Please ask for the most recent revision of this data sheet.

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