



STHAMEX® 3% F-25 #9347



SYNTHETIC FOAM CONCENTRATE

STHAMEX® 3% F-25 is a synthetic multigrade firefighting foam agent, proven for many years in countless applications, for use on pool fires of non-polar¹ liquids, as well as fires of solids and plastics.

Due to its outstandingly favorable environmental profile, its suitability for all types of foam and its high wetting capacity, STHAMEX® 3% F-25 is particularly commended for typical application scenarios of municipal fire departments as well as forest- and vegetation fires. STHAMEX multi-purpose firefighting foam agents are reliable, easy to use, universally applicable, and provide a robust foam blanket.

Performance

STHAMEX® 3% F-25 is suitable as a multi purpose firefighting foam agent for the generation of low-, medium- and high expansion foam for use on Class A- and Class B-fires (non-polar).

The surfactants used in their manufacture are biologically readily and completely degradable. We do not use fluorine- or silicone compounds or substances that are either only partially degradable or not degradable at all, and (as far as possible) we also do not use substances deriving from mineral- or palm oil. Due to the increased frost protection, STHAMEX® 3% F-25 can be stored and used outdoors at temperatures well below 0°C.

STHAMEX® 3% F-25 is specifically designed for use with mobile foam generating equipment for Class A fires and Class B (non-polar) puddle fires, as well as for non-foam application as a wetting agent and for use as a CAFS² foam. Low expansion foam made from STHAMEX® 3% F-25 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 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.

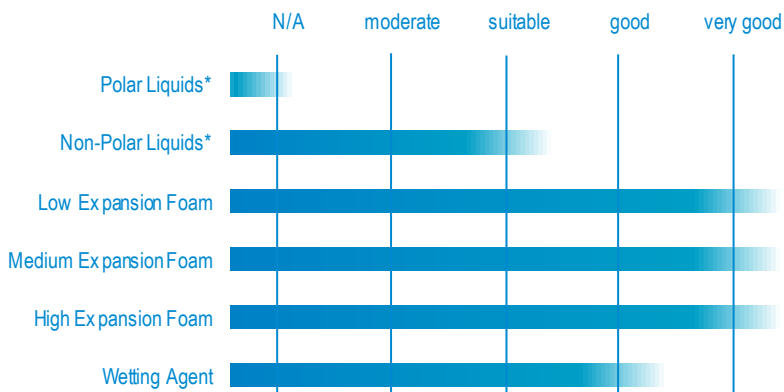
Medium expansion foam produced from solutions of STHAMEX® 3% F-25 has a homogeneous bubble structure, flows well and is stable. With suitable high-expansion foam generators, STHAMEX® 3% F-25 produces a very even high-expansion foam with expansion rates of up to 1000:1. The stable high expansion foam is able to fill the fire compartment very quickly and efficiently, displacing room air or fire gases, and can thus quickly smother and cool the fire.

Technical Specification

Appearance	colourless/yellow
Fire Class/-es	A + B
Lowest Use Temperature	-25 [°C]
Max. Storage Temperature	max. +50 [°C]
Specific Gravity (20°C)	1,020 ± 0,02 [g/ml]
pH value (20°C)	6,5 - 8,5
Viscosity (20°C)	< 20 [mPas]
Sedimentation	Sediment Free

Foam Properties acc. to EN1568 at 20°C

Induction Rate	3%
Expansion Rate	10 - 14, 70 - 110
25% Drainage Time	6 - 10, 6 - 10 [min]
50% Drainage Time	12 - 16, 11 - 15 [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-238/14
Part 3 (Heptane): IIB/IIID
Part 1: Medium Expansion Foam

¹ flammable liquids that are not miscible with water.
² CAFS: Compressed Air Foam System.

Application

STHAMEX® 3% F-25 can be foamed to Low and Medium Expansion Foam with all commercially available foam systems and equipment and used as extinguishing foam against fires of class A fires + B (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 proportioning rate to the fire water is 3%.

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.

By using medium and low expansion foam, e.g. in building fires, collateral damage caused by fire water can be significantly reduced, or very often avoided altogether.

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

For immediate use (e.g. in case of emergency) STHAMEX® 3% F-25 can be mixed in any ratio with similar firefighting foam agents. Storage of the mixture is not recommended. 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 labeled according to hazardous materials regulations.

The foam produced from STHAMEX® 3% F-25 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 and also only in 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.

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® 3% F-25 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® 3% F-25 is easily and completely biodegradable and free of organic fluorine compounds^{*3}, preservatives and silicone compounds.

After use, all parts which were in contact to STHAMEX® 3% F-25 must be thoroughly rinsed with water and cleaned to prevent any product buildup. Dried-in adhesions may require longer time soaking for removal.

Unused product (concentrate) must not be released into the environment. Disposal must be carried out in consultation with local authorities and specialised waste treatment companies.

Please also note further information in our safety data sheet!

Transport

STHAMEX® 3% F-25 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/qr/9347>



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.

³ We define fluorine-free as products that are manufactured without the intentional addition of fluororganic 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 fluororganic substances in excess of the ubiquitous regional background contamination (e.g. in the drinking water used for production).

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