



## vaPUREx<sup>®</sup> FXS 3% F-0 #2357



### FLUORINE FREE FOAM CONCENTRATE

vaPUREx<sup>®</sup> FXS 3% F-0 is a newly developed, fluorine-free\*<sup>1</sup> firefighting foam agent specially designed for use in sprinkler and deluge systems\*<sup>2</sup> on Class A and -B fires. Due to its exceptional high-performance vaPUREx<sup>®</sup> FXS 3% F-0 is approved by VdS Schadenverhütung GmbH!  
vaPUREx<sup>®</sup> FXS 3% F-0 consists of novel agents active on surfaces and interfaces, foam stabilizers and antifreeze additives in the selection and sourcing of which great emphasis is put on sustainability.  
vaPUREx<sup>®</sup> FXS 3% F-0 is easily and completely biodegradable and free of organic fluorine compounds\*<sup>1</sup>, preservatives and silicone compounds.

#### Performance

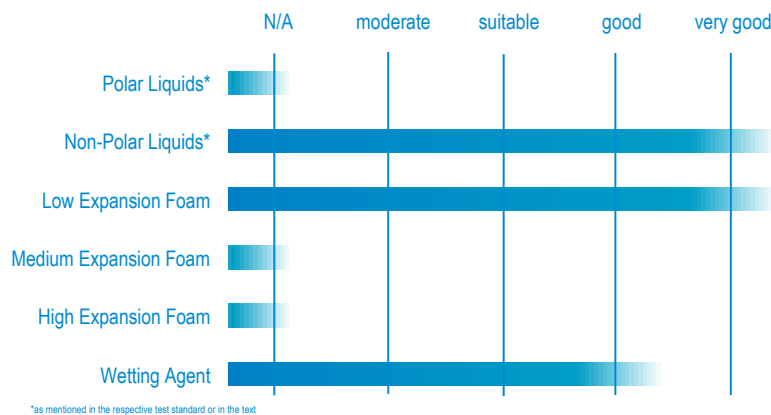
Good foamability, a very flowable and well-sealing and extremely stable low expansion foam, as well as maximum insensitivity to changing operating conditions (admixture variations, water quality, fuel influence, etc.) are the outstanding features of this exceptionally high-performance product. vaPUREx<sup>®</sup> FXS 3% F-0 proves to be exceptionally application robust: extensive tests with varying admixture, on different liquid fuels and different foam qualities confirm the outstandingly high application reliability. The particularly good environmental profile of vaPUREx<sup>®</sup> FXS 3% F-0 is proven by its classification in water hazard class (WGK) 1, or the classification of the concentrate with one point according to the Bavarian environmental classification model\*<sup>3</sup>.

#### Technical Specification

Appearance	colourless/yellow
Fire Class/-es	A + B
Lowest Use Temperature	Protect from Freezing
Max. Storage Temperature	max. +50 [°C]
Specific Gravity (20°C)	1,070 ± 0,02 [g/ml]
pH value (20°C)	6,5 - 8,5
Viscosity (20°C)	< 800(400) [mPa*s bei 75(375) 1/s]
Sedimentation	Sediment Free

#### Foam Properties acc. to EN1568 at 20°C

Induction Rate	3%
Expansion Rate	7 - 11
25% Drainage Time	8 - 12 [min]
50% Drainage Time	16 - 20 [min]
Expansion Types	Low Expansion Foam



#### Performance Tests

- DIN EN 1568** EN 1568:2018 - Approval-No.: KB 13/21 Part 3 (Heptane): IA/-
- VdS** VdS Approval: non-expanded application through foam sprinklers on non-polar liquids
- Special Fire Test** IB on Ethanol following EN1568-4 using Fresh Water
- Special Fire Test** IB on Methanol following EN 1568-4 using Fresh Water

<sup>1</sup> 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).  
<sup>2</sup> F3 can be used in sprinkler and deluge systems only if they produce a foam with certain physical properties. We will be pleased to inform you about the exact conditions and requirements.  
<sup>3</sup> The Bavarian environmental classification is a simplified model for evaluating the toxicological and ecotoxicological profile of firefighting foam agents, which was developed on behalf of the Bavarian Ministry of the Interior and is increasingly being used in Germany. For more information on this topic, please read our T1 020-Environmental Classification Foam.

## Application

vaPUREx<sup>®</sup> FXS 3% F-0 is used in fixed firefighting systems to generate Low Expansion Foam with all commercially available water-foam sprinklers and low expansion foam sprinklers to extinguish plastic fires.

vaPUREx<sup>®</sup> FXS 3% F-0 is intended for use in fixed firefighting systems and is particularly suitable for use in the chemical, mineral oil, petrochemical and pharmaceutical industries. vaPUREx<sup>®</sup> FXS 3% F-0 can be processed with common foam generating systems and devices to yield Low Expansion Foam which is used to extinguish fires of fire class A (e.g. plastics, paper, wood, tires, etc.) or fires of non-polar\*<sup>4</sup> liquid hydrocarbons (e.g. oils, greases, diesel, kerosene,...).

vaPUREx<sup>®</sup> FXS 3% F-0 is suitable for all qualities of water (fresh water, industrial water free of foam-destroying additives, sea water and brackish water). The proportioning rate to fire water is 3% for all applications. vaPUREx<sup>®</sup> FXS 3% F-0 readily dissolves in the fire water stream to give homogeneous foam solution (premix) - a certain distance between proportioner and foam generator is not required. Foam produced from vaPUREx<sup>®</sup> FXS 3% F-0 is very suitable for preventive coverage of leaks of non-polar\*<sup>4</sup> liquids to prevent ignition and vapor releases, or for coverage of dusting solids and dust binding. A non-expanded application of the premix is only effective on Class A fires under certain conditions.

## Compatibility

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.

vaPUREx<sup>®</sup> FXS 3% F-0 must not be mixed with other firefighting foam concentrates, even when used immediately (e.g. in case of emergency).

The foam produced from vaPUREx<sup>®</sup> FXS 3% F-0 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

<sup>4</sup> flammable liquids that are not miscible with water.

important aspects for the optimum storage of our products. Please do not hesitate to contact us.

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 vaPUREx<sup>®</sup> FXS 3% F-0 we recommend to have a quality test of the stock to be filled up carried out in our laboratory.

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.

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

## Environment

vaPUREx<sup>®</sup> FXS 3% F-0 was fully toxicologically tested. 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

vaPUREx<sup>®</sup> FXS 3% F-0 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/2357>



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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