



## vaPUREx<sup>®</sup> FXS LV 1% F-0 #2152



### FLUORINE FREE FOAM CONCENTRATE

vaPUREx<sup>®</sup> FXS LV 1% 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. The high extinguishing performance and a particularly good spreading low expansion foam recommend vaPUREx<sup>®</sup> FXS LV 1% F-0 for AFFF-like applications wherever non-polar\*<sup>3</sup> hydrocarbons are produced, processed, decanted, transported or stored. The low proportioning rate of only 1% offers enormous logistical advantages.

vaPUREx<sup>®</sup> FXS LV 1% F-0 is easily and completely biodegradable and free of organic fluorine compounds\*<sup>1</sup>, preservatives and silicone compounds.

#### Performance

vaPUREx<sup>®</sup> FXS LV 1% F-0 is a newly developed, fluorine-free\*<sup>1</sup>, newtonian\*<sup>4</sup> and low viscous, synthetic firefighting foam agent, for direct foam application onto non-polar hydrocarbons as Low Expansion Foam.

A special composition of raw materials suppresses fuel pick-up\*<sup>5</sup> and allows for direct (forceful) foam application onto fires of non-polar\*<sup>3</sup> liquid hydrocarbons. The low viscosity allows the use of commercially available proportioners and dosing equipment down to the lowest application temperature of

The high extinguishing performance and a particularly good spreading low expansion foam recommend vaPUREx<sup>®</sup> FXS LV 1% F-0 wherever the production, processing, decanting, transport and storage of non-polar\*<sup>3</sup> hydrocarbons are protected by extinguishing systems. Furthermore, in the plastics and recyclables storage and processing industry, e.g. in recycling plants, and wherever large fire loads have to be extinguished quickly and reliably within a very short time.

#### Technical Specification

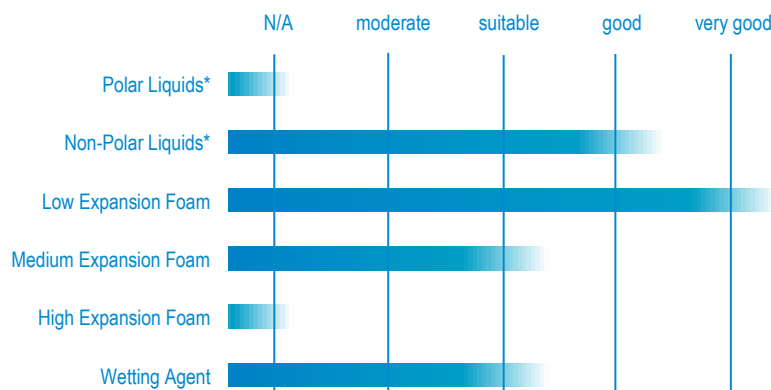
Appearance	colourless/yellow
Fire Class/-es	A + B
Lowest Use Temperature	-10 [°C]
Max. Storage Temperature	max. +50 [°C]
Specific Gravity (20°C)	1,070 ± 0,02 [g/ml]
pH value (20°C)	6,5 - 8,5
Viscosity (20°C)	< 20 [mm <sup>2</sup> /sec]
Sedimentation	Sediment Free

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

Induction Rate	1%
Expansion Rate	5 - 9, 40 - 80
25% Drainage Time	1 - 4, 1 - 3 [min]
50% Drainage Time	2 - 5, 3 - 5 [min]
Expansion Types	Low, Medium Expansion Foam

#### Performance Tests

<b>DIN EN 1568</b>	EN 1568:2008 - Approval-No.: - Part 3 (Heptane): IC/- Part 1: Medium Expansion Foam
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\*as mentioned in the respective test standard or in the text

<sup>1</sup> We define fluorine-free as products that are manufactured without the intentional addition of fluorooorganic 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 fluorooorganic 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> flammable liquids that are not miscible with water.

<sup>4</sup> For normally viscous (Newtonian) media, the flow resistance (viscosity) depends only on the liquid itself and its temperature. The acting shear forces have no influence.

<sup>5</sup> fuel pick-up means the absorption of liquid hydrocarbon fuels into the foam blanket bei either the emulsifying action of surfactants or physically by blending droplets of fuel into the foam. Fuel pick-up typically leads to a significant drop of extinguishing performance of the foam (burning foam blanket) and an increased decay of the foam.

## Application

*vaPUREx® FXS LV 1% 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® FXS LV 1% F-0* is insensitive to different fresh water qualities (e.g. water hardness). The proportioning rate to the fire water is 1%.

*vaPUREx® FXS LV 1% F-0* is newtonian\* 4 and low viscous. As a result, the product is highly pumpable and can be mixed into the fire water with all commercially available proportioning systems over the entire range of recommended use temperatures.

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.

## 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® FXS LV 1% 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® FXS LV 1% F-0* is fully compatible with all other ready expanded firefighting foams.

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. Please contact us for special packing sizes.

## 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. On short-term contact and subsequent thorough cleaning with water, *vaPUREx® FXS LV 1% F-0* or a premix solution made from it will not corrode metals such as copper, aluminum, brass, admiralty brass or bronze.

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 *vaPUREx® FXS LV 1% F-0* 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

*vaPUREx® FXS LV 1% 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® FXS LV 1% 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/2152>



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:

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