



## vaPUREx® LV 0,5% F-10 #7041



### FLUORINE FREE FOAM CONCENTRATE

vaPUREx® LV 0,5% F-10 is a newly developed, fluorine-free\* 1, newtonian\* 2 and low viscous, synthetic firefighting foam agent, for direct foam application onto non-polar hydrocarbons as low expansion foam. The particular strength of this product is its use in the production of compressed air foam in CAFS systems.

As a particularly environmentally compatible firefighting foam agent, vaPUREx® LV 0,5% F-10 is composed of novel surface- and surface-active substances, foam stabilizers and antifreeze agents, which are made from renewable raw materials to a large extent. The particularly good environmental profile of vaPUREx® LV 0,5% F-10 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\*3.

#### Performance

vaPUREx® LV 0,5% F-10 is specifically designed for use with mobile foam generating equipment for Class A fires or also for direct application to non-polar\*4 liquids, as well as for non-foaming application as a wetting agent and for use as a CAFS\*5 foam. The high extinguishing performance and a particularly good spreading low expansion foam recommend vaPUREx® LV 0,5% F-10 for AFFF-like applications wherever non-polar\*4 hydrocarbons are produced, processed, decanted, transported or stored.

It foams very well hence is excellent for the production of low expansion foam. The low viscosity allows the use of commercially available proportioners and dosing equipment down to the lowest application temperature of vaPUREx® LV 0,5% F-10 can be expanded to give low 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).

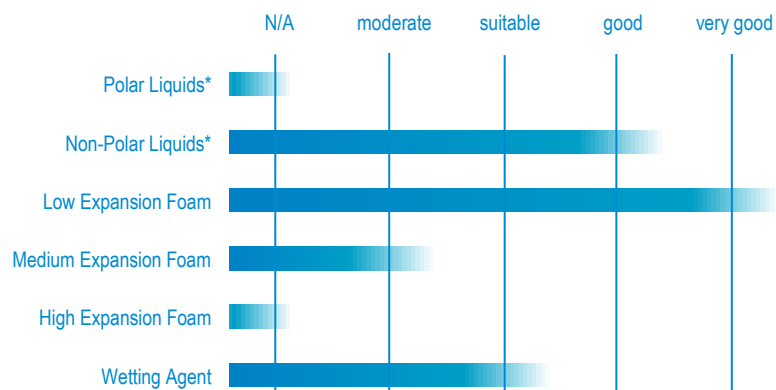
The low proportioning rate of only 0,5% offers enormous logistical advantages.

#### 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)	1,090 ± 0,02 [g/ml]
pH value (20°C)	6,5 - 8,5
Viscosity (20°C)	< 50 [mm²/sec]
Sedimentation	Sediment Free

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

Induction Rate	0,5%
Expansion Rate	7 - 11, 20 - 50
25% Drainage Time	1 - 3, 1 - 2 [min]
50% Drainage Time	2 - 5, 3 - 3 [min]
Expansion Types	Low -, Medium Expansion Foam



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

#### Performance Tests

**DIN EN 1568** EN 1568:2018 - Approval-No.: KB 106/19  
Part 3 (Heptane): IB/-  
Part 1: Medium Expansion Foam

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

2 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.

3 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.

4 flammable liquids that are not miscible with water.

5 CAFS: Compressed Air Foam System.

## Application

*vaPUREx<sup>®</sup> LV 0,5% F-10* is newtonian\* 2 and low viscous. *vaPUREx<sup>®</sup> LV 0,5% F-10* exhibits excellent foaming capabilities and is excellent for generating low expansion foam. The proportioning rate to the fire water is 0,5%. *vaPUREx<sup>®</sup> LV 0,5% F-10* is insensitive to different fresh water qualities (e.g. water hardness). *vaPUREx<sup>®</sup> LV 0,5% F-10* is forcefully applicable as low expansion foam on fires of non-polar\*4 liquids and forms an extremely stable, vapor-tight foam blanket consisting of fine and even bubbles which is free-flowing and thus highly effective in extinguishing fires. Due to its high foam density, large throw distances can be achieved.

Moreover, *vaPUREx<sup>®</sup> LV 0,5% F-10* works very well as low- or medium-expansion foam as well as wetting agent on class A-fires (e.g. paper, wood, plastics, tires, ...). As a wetting agent for class A-fires, *vaPUREx<sup>®</sup> LV 0,5% F-10* can be proportioned into the fire water from 0,1%.

## 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 labelled according to hazardous materials regulations.

*vaPUREx<sup>®</sup> LV 0,5% F-10* 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> LV 0,5% F-10* 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.

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<sup>®</sup> LV 0,5% F-10* 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<sup>®</sup> LV 0,5% F-10* was fully toxicologically tested. The product is readily biodegradable.

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> LV 0,5% F-10* 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/7041>



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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