



vaPUREx[®] LV 1% F-10 #7141



FLUORINE FREE FOAM CONCENTRATE

vaPUREx[®] LV 1% 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.

Special surfactants of the latest generation, foam stabilizers and antifreeze agents are the bases of this powerful product and its very good extinguishing performance at forceful (direct) application onto large fires of non-polar liquids. The low proportioning rate of only 1% offers enormous logistical advantages. vaPUREx[®] LV 1% F-10 exhibits increased frost resistance.

Performance

vaPUREx[®] LV 1% F-10 was developed as a fluorine-free*¹ synthetic high performance firefighting foam agent specifically for direct (AFFF-like) application on fires of non-polar*³ liquids: A special composition of raw materials suppresses fuel pick-up*⁴ and allows for direct (forceful) foam application onto fires of non-polar*³ liquid hydrocarbons.

vaPUREx[®] LV 1% F-10 is easily and completely biodegradable and free of organic fluorine compounds*¹, preservatives and silicone compounds.

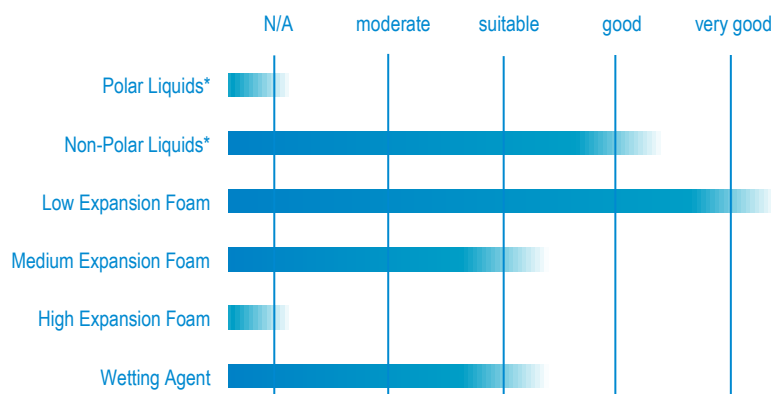
vaPUREx[®] LV 1% F-10 exhibits low viscosity and is easy flowing down to the lowest temperature for use. The low viscosity allows the use of commercially available proportioners and dosing equipment down to the lowest application temperature of

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 ² /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



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

Performance Tests

DIN EN 1568 EN 1568:2008 - Approval-No.: KB 223/17
Part 3 (Heptane): IC/-
Part 1: Medium Expansion Foam

¹ 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).
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 flammable liquids that are not miscible with water.
⁴ 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® LV 1% F-10 foams very well to yield an exceptionally well flowing and -sealing low expansion foam with very high extinguishing performance. The proportioning rate to the fire water is 1%. *vaPUREx® LV 1% F-10* is insensitive to different fresh water qualities (e.g. water hardness). The low viscosity allows the use of commercially available proportioners and dosing equipment down to the lowest application temperature of

Low expansion foam made from *vaPUREx® LV 1% F-10* 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. Due to its stable structure, the foam can also be applied to pools of flammable liquids for vapor suppression or as a preventive fire protection measure.

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 labelled according to hazardous materials regulations.

vaPUREx® LV 1% 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® LV 1% 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).

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® LV 1% 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® LV 1% 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® LV 1% 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/7141>



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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