



vaPUREx[®] FXS PLY 1% F-0 #2150



FLUORINE FREE FOAM CONCENTRATE FOR PLASTIC FIRES

vaPUREx[®] FXS PLY 1% F-0 is the first full replacement for AFFF in fixed firefighting systems for plastic hazards.

vaPUREx[®] FXS PLY 1% F-0 is 8% more powerful than AFFF, approved by VdS and suitable for all application devices.

vaPUREx[®] FXS PLY 1% F-0 is easily and completely biodegradable and free of organic fluorine compounds*¹, preservatives and silicone compounds.

Performance

vaPUREx[®] FXS PLY 1% F-0 has been specially developed for use in fixed firefighting systems protecting plastic fire risks and has been tested in an elaborate verification procedure for its suitability and outstanding extinguishing capability.

It is a synthetic firefighting foam agent free of organic silicon and fluorine compounds*¹ and preservatives. Special surfactants, foam stabilizers, polymers and antifreeze form this powerful product and are the foundation of its very good extinguishing properties.

It foams very well hence is excellent for the production of Low Expansion Foam. Low expansion foam made from vaPUREx[®] FXS PLY 1% F-0 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.

Unlike pure water, a solution of vaPUREx[®] FXS PLY 1% F-0 can wet the surface of Class A fuels very efficiently, thus achieving an excellent cooling and extinguishing effect. Plastics are evenly covered and intensively wetted by the foam solution slowly draining from the foam blanket.

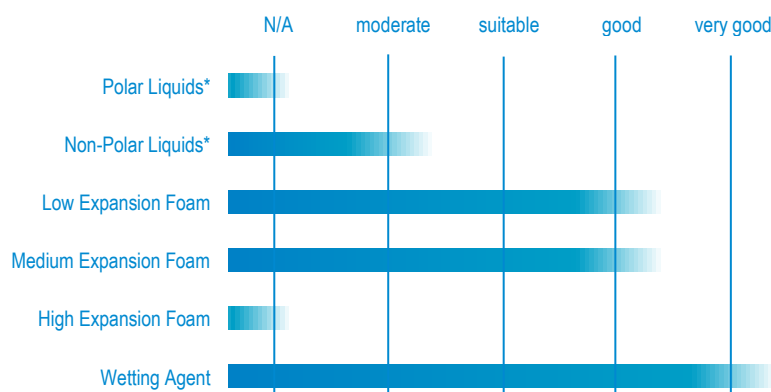
Due to the low proportioning rate of vaPUREx[®] FXS PLY 1% F-0, the storage space required for stockpiling is significantly reduced.

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)	1,010 ± 0,02 [g/ml]
pH value (20°C)	6,5 - 8,5
Viscosity (20°C)	< 30 [mm ² /sec]
Sedimentation	Sediment Free

Foam Properties acc. to EN1568 at 20°C

Induction Rate	1%
Expansion Rate	6 - 10
25% Drainage Time	3 - 7 [min]
50% Drainage Time	7 - 11 [min]
Expansion Types	Low Expansion Foam



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

Performance Tests

DIN EN 1568 EN 1568:2018 - Approval-No.: KB-133/19 Part 3 (Heptane): IIC/-

VdS VdS Approval: non-expanded application through standard sprinklers on plastics

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

Application

vaPUREx[®] FXS PLY 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 PLY 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 PLY 1% F-0 is newtonian*² 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 PLY 1% F-0 shall under no circumstances be mixed with other firefighting foam concentrates or -solutions, neither as a concentrate nor as a premix. Even the smallest quantities can render the products concerned non-useable, respectively lead to precipitation or agglomeration and consequently to equipment failure.

The foam produced from vaPUREx[®] FXS PLY 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 PLY 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 PLY 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 PLY 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 PLY 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/2150>



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

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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.

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