

Dr. **STHAMER**

FOAM FIGHTS FIRE



vaPUREx[®]



Class B fire extinguishing foam agents for refineries, chemical industries, fire services & shipping

vaPUREx[®] are the latest high-performance fire extinguishing foam agents made without added PFAS components. They are environment compatible and easily and completely biodegradable. By standards, they are classified as F3 foam agents and designed to replace AFFF and AFFF-AR products. Targeted and uncompromising in their performance vaPUREx[®] products offer extensively tested solutions to petrochemical and chemical industries and other plant fire departments.

vaPUREx[®] LV are newtonian foam agents for direct application on mineral oil fires.

vaPUREx[®] 3% is a polymer based foam agent for direct application on mineral oil fires which can also be used for ethanol and methanol fires.

For chemical industries, fire services and offshore applications we offer vaPUREx[®] AR 3/3.





The PFAS-free* alternative to AFFF foam agents

vaPUREx® LV are newtonian high-performance foam agents. A special formula allows for direct application of low- expansion foam to non-polar fuel. A further improvement of the fire performance can be made by using CAFS technology. Due to its very low proportioning rate from 0.5 % the concentrate is logistics friendly and optimises the operation tactical value of fire fighting vehicles. Likewise, the storage volume of fire extinguishing systems can be reduced. At this low proportioning rate dry or wet compressed air foam or low-expansion foam and even medium-expansion foam can be produced. All those foam types can be used for customary mineral oil products including E10 motor fuel.

vaPUREx® 3% is a polymer based foam agent. Apart from direct application on mineral oil fires **vaPUREx® 3% F-15** low-expansion foam can be used on ethanol and methanol fires as well. Hence, the product provides a universal foam agent at refineries and tank storage facilities where polar liquids such as (bio-) ethanol for blending of motor fuels are stored. Its favourable shear thinning characteristics enable proportioning with all common proportioning equipment. A high burn-back resistance offers a maximum of application safety. Likewise, the stable, polymer supported foam blanket provides effective vapour suppression in case of chemical spills.

vaPUREx® AR 3/3 is the alcohol resistant variant of our high-performance foam agents. It can be used as low-, medium- or high-expansion foam, as required. Apart from its application focus on plant and municipal fire services, it is used in shipping and aviation industries as well.

Benefits:

- easy proportioning
- very stable foam blanket
- hardly any fuel pick-up

Properties:

- made without added PFAS, 100 % biodegradable
- high-concentrated, hence maximum logistical efficiency
- produces a fast flowing, safely extinguishing foam with a high resistance against fuel pick-up (suitable for direct foam application)

Application:

- ring gap foaming on floating roof tanks
- landing jetties (inland shipping)
- road tanker filling stations / road tanker fires
- railway tank car discharge areas
- pipeline terminals
- tankfarm foaming / pipe routes / pipe trenches
- process plants
- protection of additive tanks

The excellent degradation data of these products enable economical handling of waste water from testing and training exercise with fire fighting vehicles and foam installations after consultation with the biological sewage treatment plant.

vaPUREx® LV – low viscosity fire extinguishing foam agents

Product	vaPUREx® LV 0,5%	vaPUREx® LV 1%
Proportioning rate	0.5 % (suitable for all proportioners)	1 % (suitable for all proportioners)
Foam type	Low-expansion; medium-expansion	Low-expansion; medium-expansion
Lowest temp. for use	-10°C	-10°C
Certification	EN 1568 parts 1, 3 with IB rating	EN 1568 parts 1, 3 with 1C rating
Environment	made without addition of fluoro-organic compounds and completely biodegradable	

vaPUREx® – polymer based high-performance fire extinguishing foam agents

Product	vaPUREx® 3%	vaPUREx® AR 3/3
Proportioning rate	3 %	3 % Low-expansion foam non-polar liquids 3 % Medium-expansion foam non-polar liquids 3 % High-expansion foam non-polar liquids 3 % Low-expansion foam polare, schaumzerstörende 3 % (suitable for use with venturi proportioners**)
Foam type	Low-expansion	Wetting agent, low-expansion foam, medium-expansion foam, high-expansion foam
Lowest temp. for use	-15°C	-5 °C
Certification	EN 1568 part 3 with IA rating; special test on crude oil and ethanol based on part 4	LASTfire, ICAO, IMO, special tests on crude oil, E10 motor fuel, ethanol etc.
Environment	made without addition of fluoro-organic compounds and completely biodegradable	

* All products of the vaPUREx® line are made without added PFAS. Monitoring of the actual fluorine content, at the time of editing of this flyer, refers to the lowest detectable concentration of various fluorine compounds acc. to the LANUV list. It is our ambition to position ourselves below this detection limit.

** Pseudoplastic F3-AR fire extinguishing foam agents require individual testing with proportioning equipment. vaPUREx AR 3/3 F-5 was tested extensively. Suitable venturi types are AWG Z4-FD with 38 mm suction line and TFT Z4 with 25 mm suction line, TFT ProPak, Scotty Foam-Kit 4075, FireDos DZA 1000, Gen3 Rosenbauer HydroMatic, and others.

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We provide further certified solutions for:

- VdS fire extinguishing systems covering plastics risks with vaPUREx® FXS PLY 1%
- Airport and hangar fire extinguishing systems with vaPUREx® LV ICAO B 3% and ICAO C
- Class B non-polar fire risks with VdS approved vaPUREx® FXS 3%



We are happy to advise you in person.

Our services for chemical and petrochemical industries:

- Application-technical consulting
- Foam agent analyses
- Education and training
- 24/7 emergency service

Fabrik chemischer Präparate von Dr. Richard Sthamer GmbH & Co.KG

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foams for the future