# **Product Data Sheet**





# STHAMEX®-AFFF MARINE 1% F-15 #4141



# AQUEOUS FILM FORMING FOAM CONCENTRATE

It is a synthetic firefighting foam agent free of organic silicon and fluorine compounds\*<sup>1</sup> and preservatives. *STHAMEX®-AFFF MARINE 1% F-15* is specifically designed and tested for fighting fires of chemical/petrochemical product in a maritime environment.

#### **Performance**

STHAMEX®-AFFF MARINE 1% F-15 is designed for use as Low Expansion Foam with all mobile and fixed firefighting systems and equipment, especially for extinguishing fires of fire class B.

The firefighting foam agent solution emerging from the foam forms the water film. It enhances extinguishing performance, flowability and special backfire resistance.

The fluorine components contained in the foam improve ist spreading capabilities and make it oil-repellent (oleophobic), i.e. it exhibits very low emulsifying properties and therefore hardly pics up fuel.

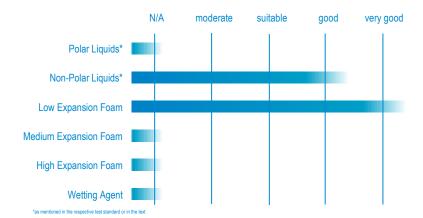
STHAMEX®-AFFF MARINE 1% F-15 is particularly suitable and tested for use in marine environments.

## **Technical Specification**

Appearance	colourless/yellow
Fire Class/-es	В
Lowest Use Temperature	-15 [°C]
Max. Storage Temperature	max. +50 [°C]
Specific Gravity (20°C)	1,060 ± 0,02 [g/ml]
pH value (20°C)	6,5 - 8,5
Viscosity (20°C)	< 20 [mm²/sec]
Sedimentation	Sediment Free

# Foam Properties acc. to EN1568 at 20°C

Induction Rate	1%
Expansion Rate	7-11
25% Drainage Time	2-6 [min]
50% Drainage Time	4 - 8 [min]
Expansion Types	Low Expansion Foam



Performance Tests



IMO MSC.1/Circ. 1312 non-polar (Heptane)



Notified Body: BG Verkehr - No. 0736 Approval-No.: 201033-02

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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 fireflighting 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).

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#### **Application**

STHAMEX®-AFFF MARINE 1% F-15 is specifically designed and tested for fighting fires of chemical/petrochemical product in a maritime environment.

STHAMEX®-AFFF MARINE 1% F-15 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%.

The foam quality mainly depends on the foam generating equipment and the volume ratio of premix to air: a lower air content of the foam yields an easily flowable low expansion foam, increasing the air volume leads to a wet medium expansion foam. Low expansion foam made from STHAMEX®-AFFF MARINE 1% F-15 forms a stable foam blanket that is highly resistant to heat and air movement.

# Compatibility

As a general rule, firefighting foam concentrates should not be mixed with each other. 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.

The foam produced from STHAMEX®-AFFF MARINE 1% F-15 is fully compatible with all other ready expanded fire-fighting foams.

# 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.

When selecting construction materials for fixed fireghting systems disimilar metal conductivity materials should be avoided to prevent or minimize electrochemical corrosion \*2. Note that firefighting foam concentrates and application solutions made from them are electrically conductive liquids.

STHAMEX®-AFFF MARINE 1% F-15 can be stored for up to 10 years or more in the originally sealed container or in suitable storage containers\* <sup>3</sup> at temperatures not below the specified frost resistance and not above 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 STHAMEX®-AFFF MARINE 1% F-15 we recommend to have a quality test of the stock to be filled up carried out in our laboratory.

#### Environment

After use, all parts which were in contact to *STHAMEX®-AFFF MARINE 1% F-15* must be thoroughly rinsed with water and cleaned to prevent any product buildup. Dried-in adhesions may require longer time soaking for removal.

The product contains organic fluorine compounds which cannot be completely degraded in the environment. 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**

STHAMEX®-AFFF MARINE 1% F-15 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/4141



Safety Advice: Please bear in mind that foam solutions are electroconductive liquids. The use in proximity to electrical/electronical 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.

<sup>2</sup> local elements (electrochemical batteries) are created, for example, when base metals are connected conductively via an electrolyte. Mostly this leads to the destruction of the more base metal hence the part made from it.
<sup>3</sup> Please refer to the additional technical information on material compatibility and storage of firefighting foam agents for information on suitable containers and container materials.

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