

## **STHAMEX®-AFFF 1% F-0 #4101**

AQUEOUS FILM FORMING FOAM CONCENTRATE



### **Description**

STHAMEX®-AFFF 1% F-0 is a synthetic, aqueous film forming fire extinguishing foam concentrate, based on surface active agents. Special surfactants, fluorinated components and freeze protection characterise the composition of this outstanding product. Using only the latest C6 technology, the fluorinated components contained in STHAMEX®-AFFF 1% F-0 are in full compliance with Directive EU 757/2010.

### **Properties**

STHAMEX®-AFFF 1% F-0 forms foam very readily and is used for both low and medium expansion foam applications. The film forming and re-ignition preventing ingredients of STHAMEX®-AFFF 1% F-0 provide for extremely fast and effective extinction especially when used on class B fires. The aqueous film formed out of the draining foam solution spreads extremely fast and enhances the flowing properties and burn-back resistance of the foam. The extinction time is reduced considerably and the fire source cooled. The aqueous film even extinguishes areas scarcely covered with foam and prevents re-igniting of areas, where the foam layer is ruptured. The foam is stable and in combination with the aqueous film, it forms a lasting, gastight layer on flammable areas. Due to its high foam density a long throwing range can be achieved. The foam is oleophobic, i.e. it does not pick up fuel and is therefore particularly suitable for „sub-surface“ foam application. Plastics are covered evenly and wetted thoroughly. On hydrocarbon products STHAMEX®-AFFF 1% F-0 can be applied as non-aspirated, aqueous solution by means of e.g. water monitors, water sprinklers, deluge systems etc.

STHAMEX®-AFFF 1% F-0 is not suitable for use on polar solvents, e.g. alcohols.

STHAMEX®-AFFF 1% F-0 does not contain silicones.

### **Application**

STHAMEX®-AFFF 1% F-0 is used at 1% concentration and applied with all standard low expansion foam equipment and fixed foam installations especially for class B fires. The non-aspirated solution of STHAMEX®-AFFF 1% F-0 can be applied using water monitors, water sprinklers or deluge systems. Seawater, brackish water and treated industrial water do not affect the outstanding fire performance.

STHAMEX®-AFFF 1% F-0 is used in petrochemical industries, on airports and in on- and offshore areas. It is also used in plastics and recycling industries and

generally, where large fire loads have to be extinguished safely and within the shortest time possible. When used near electrical installations observe DIN/VDE-0132, or equivalent national standards.

### **Environment**

None of the raw materials used in our products are banned. Our foam concentrates comply with the latest environmental regulations, such as 'Commission Regulation (EU) No 757/2010', amending '(EC) No 850/2004.' STHAMEX®-AFFF 1% F-0 will also comply with the 'significant new use rule (SNUR)' for long-chain perfluoroalkyl carboxylate proposed by the Environmental Protection Agency, which will come into effect in due course.

### **Compatibility with other foam concentrates**

#### Mixing for immediate use:

STHAMEX®-AFFF 1% F-0 may be mixed at any proportion with equivalent foam concentrates if used immediately.

#### Mixing for long term storage:

Prior to replenishment, the quality of STHAMEX®-AFFF 1% F-0 stocks should be examined by our laboratory.

Blending of STHAMEX®-AFFF 1% F-0 with similar AFFF concentrates for long-term storage is not recommended unless tested and approved by our laboratory.

#### Mixing with synthetic concentrates:

STHAMEX®-AFFF 1% F-0 must not be mixed with synthetic detergent, alcohol resistant, or protein foam concentrates.

#### Mixing with other expanded foams:

When deployed, STHAMEX®-AFFF 1% F-0 foam is compatible with all other generated foams.

### **Compatibility with powder**

STHAMEX®-AFFF 1% F-0 is suitable for the combined use with foam compatible dry chemical powders.

### **Packaging**

STHAMEX®-AFFF 1% F-0 is available in jerrycans, plastic drums, iron drums, pallet containers (totes) and in bulk.

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### Storage

STHAMEX®-AFFF 1% F-0 is stored long term in the sealed original containers or in non-corrosive plastic or stainless steel tanks. High temperatures up to 50°C do not affect the quality, neither does temporary freezing below the specified frost resistance limit. (see technical leaflet TM 014 "Storage of synthetic foam concentrates"). Before re-filling foam concentrate stocks arrange for a quality check-up by our laboratory.

### Shelf Life

STHAMEX®-AFFF 1% F-0 has a shelf life of >10 years, if stored according to our recommendations (see technical info leaflet TM014 'Storage of Synthetic Fire Extinguishing Foam Concentrates').

### Approval

STHAMEX®-AFFF 1% F-0 is approved as fire extinguishing agent for fires of class A and B according to the following standards:



Certificate No.: KB-304/14  
Part 3 (Heptane): IA/IA



LASTfire  
reduced --- good --- accept.

Physical properties and technical data		STHAMEX®-AFFF 1% F-0	
Recommended induction rate	1%	low expansion foam	non-polar liquids
Foam expansion* (according to EN 1568)	5 - 10	low expansion foam*	
25%/50% water drainage time* (according to EN 1568)	2 - 4 minutes	4 - 8 minutes	low expansion foam*
Colour	yellow to brown		
pH value	at 20°C	6,5 - 8,5	
Density	at 20°C	1,040 ± 0,02 g/ml	
Sediments	none		
Surface tension/Spreading coefficient	< 17,0 mN/m	> 3 mN/m (Cyclohexane)	
Frost resistance	0°C (prevent from freezing)		
Viscosity	at 20°C	< 15	mm²/sec
	at 0°C	< 30	mm²/sec
Environmental acceptability	STHAMEX®-AFFF 1% F-0 is physiologically harmless and readily bio degradable. Fluorine components are not fully degradable. See material safety data sheet for further information.		
Special notes	STHAMEX®-AFFF 1% F-0 poses no health risk, provided it is used as intended as fire extinguishing foam. Fire fighting exercise and testing may have to be agreed with local authorities. Take into account when spraying persons with foam that they will not be able to breathe whilst covered with foam. See material safety data sheet for further information.		
* Foam expansion and drainage times may vary, depending on foam equipment and operating pressure.			



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