# STHAMEX-class-A

# Fire extinguishing foam concentrate

### **Description**

**STHAMEX-class-A** is a synthetic fire extinguishing foam for extinguishing solid matter (class A) and is based on special wetting agents.

### **Properties**

Faster than usual foam concentrates STHAMEXclass- A penetrates the surface of combustible solids resulting in extraordinary cooling and extinguishing effectiveness. CAFS application intensifies the wetting and extinguishing effect.

The compressed air used with this application method characterises the foam properties. The foam bubbles are particularly small and stable for long lasting adherence of the foam to solids. The foam solution drains slowly and steadily onto the combustible surface which at the same time is being sheltered from heat radiation.

Thus the foam solution continuously penetrates the burning material and permanently wets its surface without draining instantly as it would be the case if only water was used. The cooling effect by constant evaporation of the extinguishing agent is being improved. The efficiency of the extinguishing agent used is increased by the multiple: compared to water the effectiveness of extinguishing agent is raised by 7-8 times.

When **STHAMEX-class-A** is used inside buildings the damage caused by water is reduced considerably.

**STHAMEX-class-A** complies with DIN EN 1568 standard.

Recommended induction rate	class A 0.1 % to 1 % - preferably 0.5 % -		class B low expansion foam1.0 % medium expansion foam1.0 % high expansion foam1.0 %
Foam expansion	depending on foam equipment and water pressure		
(acc. to DIN EN 1568)	low expansion foam medium expansion foam high expansion foam	≤20times ≥20 to 200times ≥200times	
Foam stability	50 % water drainage time depending on foam equipment and water pressure		
(acc. to DIN EN 1568)	low expansion foam medium expansion foam high expansion foam	≤10/15 minutes ≤15/25 minutes ≤10/15 minutes	
Density	1.04 ± 0.02 kg/l		
Frost resistance	-15 °C		
pH value	6.5 to 8.5		
Sediment content	none		
Viscosity	20 °C ≤ 20 0 °C ≤ 50 -15 °C ≤ 150	mm²/s	
Environmental acceptability	STHAMEX -class-A is physiologically harmless and easily biodegradable.		
Special notes	STHAMEX -class-A is not detrimental to health, provided it is used for the intended purpose. Fire extinguishing exercises and tests may have to be coordinated with the local authorities.  When persons are sprayed with foam, please bear in mind that they will not be able to breathe while covered with foam. For further information users are asked to refer to the safety data sheet.		

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### **Application**

STHAMEX-class-A is designed for use with high-pressure fire extinguishing systems and Compressed Airfoam Systems for fighting class A and B fires. Used with conventional foam equipment STHAMEX-class-A is suitable for all low, medium and high expansion foam applications. For use as wetting agent conventional branch pipes are used. **STHAMEX-class-A** is suitable for fighting forest and bush fires by air.

For extinguishing solids STHAMEX-class-A is induced at 0.5 % to water; and 1.0 % for extinguishing non-polar hydrocarbons. At low induction rates the generated foam is wet and flowable; higher concentrations provide a stiff, well adhering and insulating foam. As from an induction rate of 0.1% STHAMEX-class-A is also used as wetting agent. Thanks to its low application concentrations only little storage capacity is required.

# **Compatibility with other** foaming agents

For immediate usage STHAMEX-class-A can be mixed with any other equivalent foaming agent, independent of the mixing ratio.

When STHAMEX-class-A shall be added to existing stocks of foaming agents we recommend to have the quality of the available stock tested by our laboratory.

## Compatibility withother fire extinguishing foams

The foam generated from STHAMEX-class-A is compatible with all other readily expanded fire extinguishing foams.

Compatibility with powder STHAMEX-class-A is suitable for the combined use with foam compatible powders.

#### Storage

STHAMEX-class-A can be stored for long periods of time in the sealed original containers and in corrosion- resistant plastic or stainless steel tanks. High temperatures up to +50 °C do not affect the quality; neither does temporary freezing at temperatures below the specified frost resistance limit.

### Approval

SP 12/03

STHAMEX-class-A is an officially approved foam fire extinguishing agent for low, medium and high expansion foam applications for class

A + B fires acc. to DIN 14 272 Approval No. SP 17/99 acc. to DIN EN 1568. Approval No.



