



FOAM CONCENTRATES

for the mining industry

With the experience of more than 125 years Dr. Sthamer-Hamburg has designed foam concentrates for the special tasks of the mining industry. All products are synthetic based for a long shelf life and contain freeze protection for storage and use in tough winter conditions.

STHAMEX®

products are synthetic detergent foams for use on class A and B fires. Applied as medium expansion foam STHAMEX® products are particularly effective on brown coal dust fires offering safe fire extinguishment. The wetting effect of these products provides fast flame control along with excellent cooling properties also on smouldering fires.

STHAMEX®-AFFF

products are more powerful and easy to use on class B fires. The aqueous film provides fast flame knockdown us-

ing less foam. Especially premix fire-fighting systems and high-pressure water mist systems are more efficient with STHAMEX®-AFFF.





STHAMEX®

comprises a product line of synthetic foam fire extinguishing agents for low, medium and high expansion foam applications. Surface-active agents, foam stabilisers and antifreeze compounds characterise these efficient, well-proven foam concentrates. The products are certified according to EN 1568 for class A and B fires. Additionally they are listed in the mining approved product list for safe use underground.

In coal mines **STHAMEX®** foam concentrates are used for preventive foam application on fiery seams. **STHAMEX®** products are used with all usual foam equipment including compressed air foam systems (CAFS). All foam qualities can be generated with fresh and seawater as well as cold brine. **STHAMEX®** products are 100% biodegradable.

STHAMEX®-AFFF

comprises a product line of synthetic, aqueous film forming foam fire extinguishing agents. They are especially designed for very quick and effective fire fighting action. On class B liquid hydrocarbon fires **STHAMEX®-AFFF** forms a self-sealing duplex aqueous film, which extinguishes the fire even without foam.

STHAMEX®-AFFF products are based on surface-active agents. Fluorine components and, where applicable antifreeze additives characterise the composition of this extremely effective fire fighting foam concentrate. **STHAMEX®-AFFF** foams concentrates, some of which do not require CLP marking, are certified according to EN 1568. **STHAMEX®-AFFF** is applied with all usual foam aspirating and non-aspirating equipment and can also be used as premix in pressurised foam systems and quick attack units.

Products	STHAMEX® 3% F-15	STHAMEX®-class A Classic	STHAMEX®-AFFF 3 %	STHAMEX®-AFFF 6 %
Induction rate	Low expansion foam 3% Medium expansion foam 3% High expansion foam 2% to 3% Wetting agent 0.5% to 1%	Class A from 0.5%* Class B from 1.0%* Wetting agent 0,1% - 0,3%	3%	6%
Foam expansion*	Low expansion foam ≤ 20times Medium expansion foam ≤ 200times High expansion foam > 200times	Low expansion foam ≤ 20times Medium expansion foam ≤ 200times	Low expansion foam up to 15 times Medium expansion foam up to 100 times	
Water drainage time* 25% / 50%	Low expansion foam 15/25 Min. Medium expansion foam 20/30 Min. High expansion foam 15/25 Min.	Low expansion foam 10/15 Min. Medium expansion foam 10/20 Min.	Low expansion foam up to 5/8 minutes Medium expansion foam up to 4/6 minutes	
Frost resistance	-15°C	-15°C	0 °C / -15 °C / -25 °C	
Viscosity 20 °C 0 °C	≤ 20 mm ² /s ≤ 30 mm ² /s	≤ 20 mm ² /s ≤ 50 mm ² /s	≤ 10 mm ² /s ≤ 20 mm ² /s ≤ 30 mm ² /s	
Lowest use temp.	≤ 110 mm ² /s	≤ 150 mm ² /s		
Application	Non polar hydrocarbon fires; fires of solids, plastics and recycling materials		Fires of non polar hydrocarbons and solvents (immiscible with water), solid fires (eg plastic), recycling facilities which have fire water runoff collection capacity.	
Type approval	Officially approved in accordance with DIN EN 1568 part 1, 2, 3 for use as low, medium and high expansion foam for class A + B fires	Officially approved in accordance with DIN EN 1568 part 1, 3 for use as low and medium expansion foam for class A + B fires	Officially approved according to DIN EN 1568 for class A + B fires.	
Physiological/ ecological properties	STHAMEX® and STHAMEX®-class A Classic are fluorine free, physiologically harmless and very readily biodegradable.		STHAMEX®-AFFF products are physiologically harmless and biodegradable. Fluorine components are not entirely biodegradable.	

*according to DIN EN 1568 part 1, 3. All foam concentrates comply with European regulation 757/2010

