

MOUSSOL®-FF Plus 3/6 F-15 #8941

ALCOHOL RESISTANT FOAM CONCENTRATE



Description

MOUSSOL®-FF Plus 3/6 F-15 is a fluorine-free, alcohol resistant, synthetic fire extinguishing foam concentrate. It is designed for use as low, medium and high expansion foam.

MOUSSOL®-FF Plus 3/6 F-15 is based on surface and interface active ingredients, polymers, foam stabilisers and antifreeze agents, that are to a large extent produced from sustainable raw materials.

MOUSSOL®-FF Plus 3/6 F-15 succeeds our previous MOUSSOL®-FF products with improved performance on polar solvent fires. Premix stability and seawater resistance are enhanced at the same time.

MOUSSOL®-FF Plus 3/6 F-15 is readily and fully bio degradable. It contains no fluorine or silicone compounds and no preservatives.

Properties

MOUSSOL®-FF Plus 3/6 F-15 is resistant to both foam destroying polar (water miscible) and non polar (water immiscible) hydrocarbons and their blends. On polar solvents a polymer film forms a safe barrier against the foam destroying effect of the chemical. On non polar hydrocarbons the polymer film forming polysaccharides provide additional foam stability.

MOUSSOL®-FF Plus 3/6 F-15 has excellent foaming properties and is therefore suitable for generating low, medium and high expansion foam.

MOUSSOL®-FF Plus 3/6 F-15 foam extinguishes safely and provides a gas-tight cover over the flammable surface. The foam proves resistant and stable against heat radiation, combustion fumes and air movement. The danger of re-ignition of already extinguished areas of a fire is reduced accordingly.

MOUSSOL®-FF Plus 3/6 F-15 reduces the surface tension of water and is therefore suitable for use as wetting agent.

Application

MOUSSOL®-FF Plus 3/6 F-15 is used with all customary low, medium and high expansion foam equipment and fixed foam installations. Additional testing is required if MOUSSOL®-FF Plus 3/6 F-15 is to be used in fixed fire extinguishing installations. The proportioning rate to water is 3% for fires of non polar hydrocarbons and 6% for fires of polar, foam destroying liquids. Ethanol and Methanol can be extinguished with a proportioning rate of 3%. Equally, the production of medium and high expansion foam requires a proportioning rate of just 3%.

MOUSSOL®-FF Plus 3/6 F-15 can be used with tap water, seawater and recycled industrial water, the absence of foam destroying substances provided. Due to its viscosity (pseudo-plastic properties) pump supported proportioning may be required at concentrate temperatures below 5°C.

Extinguishing of polar solvent fires requires gentle foam

application using e.g. goose necks or foam slides to achieve best results (see technical information TI 0137 'Foam Application on Polar Fuels').

Spilled chemicals can be covered with MOUSSOL®-FF Plus 3/6 F-15 foam to prevent hazardous emissions. The foam blanket suppresses gas evaporation and prevents spreading and possible ignition of hazardous gas.

At 0.5% proportioning rate MOUSSOL®-FF Plus 3/6 F-15 can be used as wetting agent.

Observe DIN VDE 0132 or equivalent regulations if used in the presence of electrical installations.

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.' MOUSSOL®-FF Plus 3/6 F-15 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:

MOUSSOL®-FF Plus 3/6 F-15 must not be mixed with other fire extinguishing foam concentrates. Even small amounts may render the products unusable. It is recommended to rinse proportioning equipment prior to changing the foam concentrate.

Mixing for long term storage:

See above

Mixing with synthetic concentrates:

See above

Mixing with other expanded foams:

During fire fighting operation foam generated from MOUSSOL®-FF Plus 3/6 F-15 is compatible with all other generated foams.

Compatibility with powder

MOUSSOL®-FF Plus 3/6 F-15 is suitable for the combined use with foam compatible dry chemical powders.

Packaging

MOUSSOL®-FF Plus 3/6 F-15 is available in jerrycans, plastic drums, iron drums, pallet containers (totes) and in bulk.

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Storage

MOUSSOL®-FF Plus 3/6 F-15 can be stored long term in the original sealed containers as well as in suitable storage tanks. The efficacy of MOUSSOL®-FF Plus 3/6 F-15 is neither affected by high ambient temperatures up to +50°C nor by temporary freezing below the indicated frost resistance limit (see technical information TI 014 'Storage of synthetic foam concentrates').

Prior to replenishment we recommend a quality check of the existing stock of MOUSSOL®-FF Plus 3/6 F-15 by our laboratory.

Shelf Life

MOUSSOL®-FF Plus 3/6 F-15 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

MOUSSOL®-FF Plus 3/6 F-15 is type tested and certified as fire extinguishing agent for class A + B fires according to the following standards:



Certificate No.: KB-203/18
Part 3 (Heptane): IIIB/IIIC
Part 4 (Aceton): IA/IA --- (IPA): IB/IB
Part 1: Medium ex. --- Part 2: High ex.



ICAO Airport Services Manual
Low expansion foam --- Level B

Physical properties and technical data		MOUSSOL®-FF Plus 3/6 F-15		
Recommended induction rate		0,5%	wetting agent	solid materials
		3%	low expansion foam	non-polar liquids
		3%	medium expansion foam	non-polar liquids
		3%	high expansion foam	non-polar liquids
		6%	low expansion foam	polar liquids
Foam expansion* (according to EN 1568)		5 - 10	low expansion foam*	
		60 - 120	medium expansion foam*	
		400 - 800	high expansion foam*	
25%/50% water drainage time* (according to EN 1568)		4 - 8 minutes	8 - 15 minutes	low expansion foam*
		2 - 5 minutes	5 - 10 minutes	medium expansion foam*
		2 - 4 minutes	4 - 6 minutes	high expansion foam*
Colour		colorless to yellow		
pH value	at 20°C	6,5 - 8,5		
Density	at 20°C	1,070 ± 0,02 g/ml		
Sediments		none		
Frost resistance		-15°C		
Viscosity	at 20°C	< 800(400)	mPa*s bei 75(375) 1/s	
	at 0°C	< 1200 (650)	mPa*s bei 75(375) 1/s	
	at -15°C	< 1500(750)	mPa*s bei 75(375) 1/s	
Environmental acceptability		MOUSSOL®-FF Plus 3/6 F-15 is physiologically harmless and fully biodegradable. See material safety data sheet for further information.		
Special notes		MOUSSOL®-FF Plus 3/6 F-15 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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