

## **MOUSSOL®-APS 3/3 F-15 #3341**

ALCOHOL RESISTANT AFFF FOAM CONCENTRATE



### **Description**

MOUSSOL®-APS 3/3 F-15 is a pseudoplastic, alcohol resistant AFFF fire extinguishing foam concentrate. Polymer film formers, aqueous film forming fluorine components and foam stabilisers characterise the composition of this excellent fire extinguishing foam concentrate. In parts, the product is made from natural, renewable sources. Using only the latest C6 technology, the fluorinated components contained in MOUSSOL®-APS 3/3 F-15 are in full compliance with Directive EU 757/2010.

### **Properties**

MOUSSOL®-APS 3/3 F-15 has excellent fire performance, flowability and burn-back resistance on both polar and non-polar, foam destroying liquids. The polymer film has a specific, foam stabilising effect. It is formed by a physical interaction between a polar solvent and the foam layer above. On non-polar hydrocarbons, an extremely thin aqueous film is formed which flows ahead of the foam. A relatively short water drainage time enhances aqueous film formation and the flowability of the foam. This effect reduces control times significantly and cools down the fire source.

MOUSSOL®-APS 3/3 F-15 provides for a swift and effective fire fighting success with excellent performance reserves. The risk of re-ignition of extinguished areas is reduced significantly.

### **Application**

MOUSSOL®-APS 3/3 F-15 is used with all standard low and medium expansion foam installations and mobile equipment. It is specially designed for polar, foam destroying liquids, e.g. alcohols, esters, ketones as well as non-polar hydrocarbons, e.g. petroleum products. The induction rate is 3% in water for polar solvents and for hydrocarbon fires as well as for medium expansion foam applications. Aqueous film forming fluorine components allow for non-aspirated application on non-polar hydrocarbons.

MOUSSOL®-APS 3/3 F-15 is also used to cover spilled chemicals to prevent flammable and toxic gas emissions. A gentle foam application is required in order to combat polar solvent fires effectively (see technical leaflet TM 037 „Extinguishing alcohol fires“). Pump-supported induction may be required for temperatures below 5°C.

MOUSSOL®-APS 3/3 F-15 is used with tap water,

seawater, brackish water and treated industrial water. When used in 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.’ MOUSSOL®-APS 3/3 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®-APS 3/3 F-15 can be mixed at any proportion with equivalent foam concentrates if used immediately.

#### Mixing for long term storage:

It is not recommended to mix MOUSSOL®-APS 3/3 F-15 with equivalent foam concentrates when stored. Prior to replenishment, the quality of MOUSSOL®-APS 3/3 F-15 stocks should be examined by our laboratory.

#### Mixing with synthetic concentrates:

MOUSSOL®-APS 3/3 F-15 must not be mixed with other types foam concentrates.

#### Mixing with other expanded foams:

MOUSSOL®-APS 3/3 F-15 foam is compatible with all other generated fire fighting foams.

### **Compatibility with powder**

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

### **Packaging**

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

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## Storage

MOUSSOL®-APS 3/3 F-15 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

MOUSSOL®-APS 3/3 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®-APS 3/3 F-15 is approved as fire extinguishing agent for fires of class A and B according to the following standards:



Certificate No.: KB-275/14  
Part 3 (Heptane): IA/IA  
Part 4 (Aceton): IA/IB --- (IPA): IB/IB  
Part 1: Medium ex. --- Part 2: High ex.



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



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



LASTfire  
good --- good --- good

Physical properties and technical data		MOUSSOL <sup>®</sup> -APS 3/3 F-15		
Recommended induction rate		3%	low expansion foam	non-polar liquids
		3%	medium expansion foam	non-polar liquids
		3%	low expansion foam	polar liquids
Foam expansion* (according to EN 1568)		5 - 10	low expansion foam*	
		60 - 120	medium 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*
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		< 17,5 mN/m	> 3 mN/m (Cyclohexane)	
Frost resistance		-15°C		
Viscosity	at 20°C	< 250(100)	mPa*s bei 75(375) 1/s	
	at 0°C	< 400(150)	mPa*s bei 75(375) 1/s	
	at -15°C	< 500(200)	mPa*s bei 75(375) 1/s	
Environmental acceptability		MOUSSOL®-APS 3/3 F-15 is physiologically harmless and readily bio degradable. Fluorine components are not fully degradable. See material safety data sheet for further information.		
Special notes		MOUSSOL®-APS 3/3 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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