# **MOUSSOL®-APS LV 1/3 F-15**#6441 ALCOHOL RESISTANT AFFF FOAM CONCENTRATE



# **Description**

*MOUSSOL®*-*APS LV 1/3 F-15* is an alcohol resistant low viscosity AFFF fire extinguishing foam concentrate without added polysaccharides. It is based on special, fluorinated components, surfactants, antifreezing compounds and foam stabelisers.

*MOUSSOL®-APS LV 1/3 F-15* is a newtonian liquid and does not contain polymers. In parts, the product is made from natural, renewable sources. The fluorinated components contained in *MOUSSOL®-APS LV 1/3 F-15* are in full compliance with Directive EU 757/2010.

### **Properties**

Due to its low viscosity, *MOUSSOL®-APS LV 1/3 F-15* flows freely up to the freeze point. The foam is resistant against polar solvents and non-polar, foam destroying hydrocarbons alike. On non-polar hydrocarbons *MOUSSOL®-APS LV 1/3 F-15* forms an extemely thin, aqueos film 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 the extinction time significantly and cools down the fire source. Aqueous film forming components allow its non-aspirated application on mineral oil based hydrocarbons. On polar solvents, a film forms which provides for a safe barrier against the foam destroying properties of the chemical.

 $MOUSSOL^{\otimes}$ -APS LV 1/3 F-15 provides for fast and effective extinction of class A + B fires. The foam is stable and forms a lasting, gastight layer over the flammable surface. The risk of re-ignition of extinguished areas is reduced considerably.

## **Application**

*MOUSSOL®-APS LV 1/3 F-15* is used with all standard low and medium expansion foam 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 1% for hydrocarbon fires. For medium expansion foam applications on hydrocarbon fires the induction rate is 3%. Aqueous film forming fluorine components allow for non-aspirated application on non-polar hydrocarbons.

*MOUSSOL®-APS LV 1/3 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").

*MOUSSOL®*-*APS LV 1/3 F-15* is used with tap water, seawater, brackish water and treated industrial water. When used in the presence of 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 LV 1/3 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 LV 1/3 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  $MOUSSOL^{\otimes}-APS LV$ 1/3 *F-15* with equivalent foam concentrates when stored. Prior to replenishment, the quality of  $MOUS-SOL^{\otimes}-APS LV$  1/3 *F-15* stocks should be examined by our laboratory.

Mixing with synthetic concentrates:

*MOUSSOL®-APS LV 1/3 F-15* must not be mixed with other types foam concentrates.

#### Mixing with other expanded foams:

*MOUSSOL®-APS LV 1/3 F-15* foam is compatible with all other generated fire fighting foams.

## Compatibility with powder

*MOUSSOL®-APS LV 1/3 F-15* is suitable for the combined use with foam compatible dry chemical powders.

#### **Packaging**

*MOUSSOL®-APS LV 1/3 F-15* is available in plastic cans, plastic drums, IBC's (totes) and in bulk.

# **MOUSSOL®-APS LV 1/3 F-15**#6441 ALCOHOL RESISTANT AFFF FOAM CONCENTRATE



# Storage

*MOUSSOL®-APS LV 1/3 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

 $MOUSSOL^{\otimes}$ -APS LV 1/3 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').

# **Conformity/Listings**

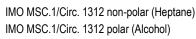
*MOUSSOL®*-*APS LV 1/3 F-15* is approved as fire extinguishing agent for fires of class A and B according to the following standards:



EN 1568:2008 - Certificate No.: KB-241/15 Part 3 (Heptane): IB/IB Part 4 (Aceton): IC/IC --- (IPA): IA/IA Part 1: Medium ex.



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



Physical properties and technical data MOUSSOL <sup>®</sup> -APS LV 1/3 F-15				
Recommended induction r	ate	1% 3% 3%	low expansion foam medium expansion foam low expansion foam	non-polar liquids non-polar liquids polar liquids
Foam expansion* (according to EN 1568)		5 - 9 90 - 130	low expansion foam* medium expansion foam*	
25%/50% water drainage time* (according to EN 1568)		1 - 4 minutes 1 - 4 minutes	2 - 6 minutes 3 - 6 minutes	low expansion foam* medium expansion foam*
Colour		yellow to brown		
pH value at	20°C	6,5 - 8,5		
Density at	20°C	1,060 ± 0,02 g/ml		
Sediments		none		
Surface tension/Spreading coefficient		< 17,5 mN/m	> 3 mN/m (Cyclohexane)	
Frost resistance		-15°C		
Viscosity at at at	20°C 0°C -15°C	< 10 mm²/sec < 20 mm²/sec < 40 mm²/sec		
Environmental acceptability		MOUSSOL®-APS LV 1/3 F-15 is readily bio degradable. Fluorine components are not fully degradable. See material safety data sheet for further information.		
Special notes		<i>MOUSSOL®-APS LV 1/3 F-15</i> poses no health risk, provided it is used as intended as fire extinguishing foam. Firefighting exercise and testing may have to be agreed with local authorities. Consider 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.		



Hauptsitz Hamburg: Liebigstraße 5 • 22113 Hamburg/Germany Tel.: +49 (0)40 736168-0 • Fax: +49 (0)40 736168-60 info@sthamer.com • www.sthamer.com Verkaufsbüro Hannover: Tel.: +49 (0)511 76835845 Fax: +49 (0)511 76835846 Verkaufsbüro Jena: Tel.: +49 (0)3641 6353857 Fax: +49 (0)3641 6353859

